

# Arlington House, The Robert E. Lee Memorial

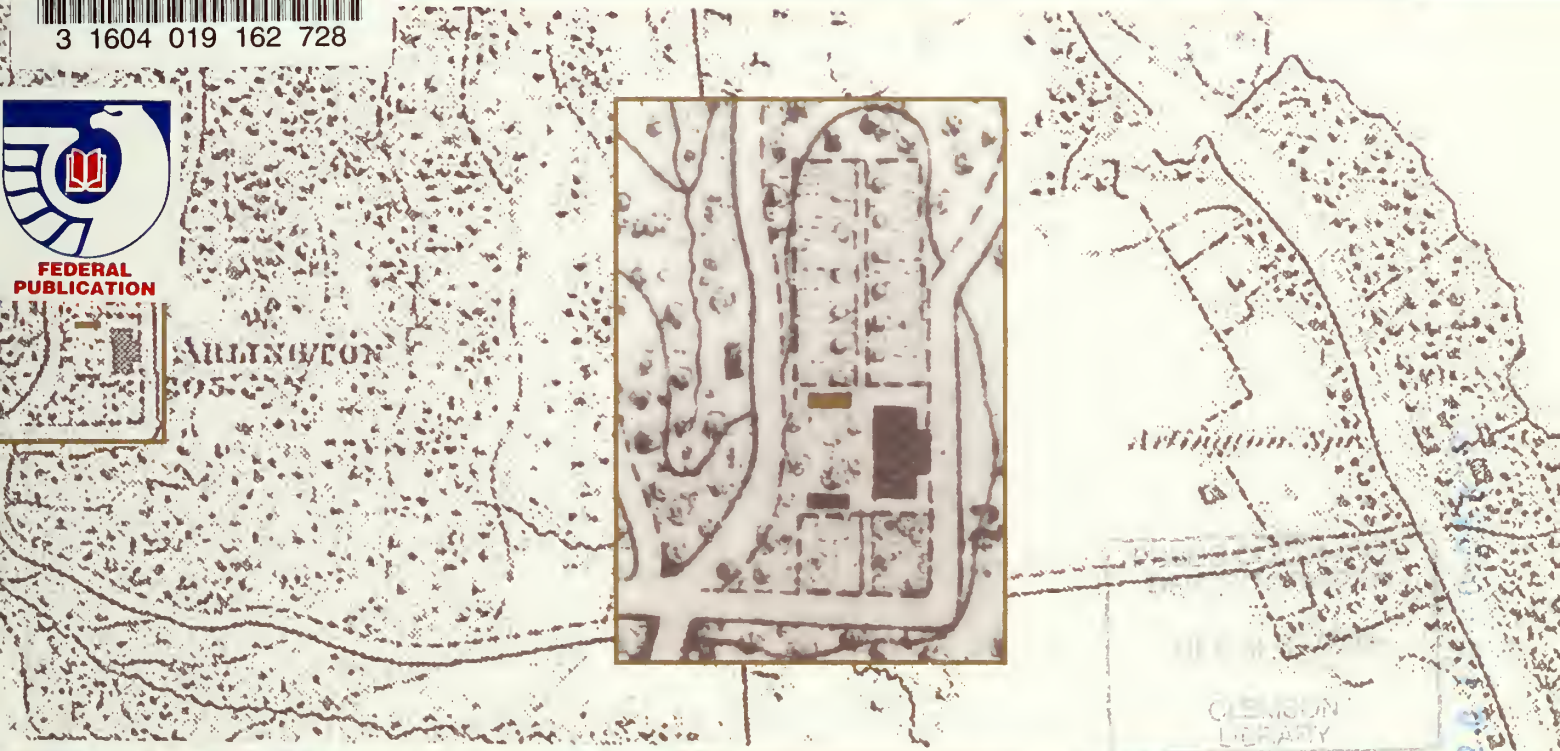
## North Dependency Historic Structure Report




Clemson University



3 1604 019 162 728





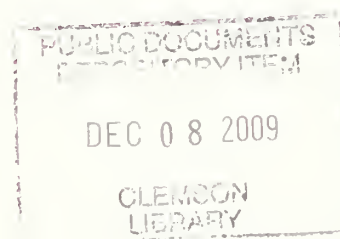
Digitized by the Internet Archive  
in 2012 with funding from  
LYRASIS Members and Sloan Foundation

<http://archive.org/details/arlingtonhouzero00fish>



# Arlington House, The Robert E. Lee Memorial

## North Dependency Historic Structure Report



2010-0053-P

Report prepared by Charles Fisher, Chad Randl and Kaaren Staveteig









## **Table of Contents**

### **Introduction**

- Executive Summary
- Restoring the Arlington House Dependencies

### **Part I**

- A) Historical Background and Context
- B) Chronology of Development and Use
- C) Physical Description/Conditional Assessment

### **Part II**

- A) Ultimate Treatment and Use
- B) Requirements for Treatment
- C) Bibliography

### **Appendices**

- A) National Park Service List of Classified Structures
- B) Historic Drawings
- C) Existing Conditions
- D) Material testing
- E) Field Notes
  - 1) Exterior Finishes--survey
  - 2) Exterior Woodwork--survey
  - 3) Architectural and Finishes Survey (George T. Fore & Associates)
  - 4) Interior
- F) Supplemental Drawings (Preservation Associates, Inc.)
- G) Photo Study
- H) Floor Study (Volz & Associates, Inc.)
- I) Period and Rehabilitation Drawings (Volz & Associates, Inc.)
- J) Illustration from Gunston Hall



# Introduction

## *Executive Summary*

---





## **Statement of Purpose**

The purpose of this Historic Structures Report is to function as a central repository of information, analysis and conclusion resulting from the investigation of the North Dependency (North Servant's Quarters) at Arlington House, The Robert E. Lee Memorial, by National Park Service (NPS) historians and their associated consultants in 2002 and 2003. Based on a resulting understanding of the history, appearance, and use of the structure over time (with particular emphasis on the period around 1860), this document will also propose an appropriate restoration program that will enable the NPS to better interpret the building, its occupants and functions during the period of significance.

## **The Building Today**

Part of the Arlington House, The Robert E. Lee Memorial in Arlington, Virginia, the North Dependency (North Servant's Quarters) is one of two buildings contemporary with the Arlington House at the time when the Robert E. Lee family was in residence, just prior to the Civil War. This National Park Service site is administered by the George Washington Memorial Parkway, Turkey Run, Virginia, and is within the National Capital Region. Similar in architecture to the South Dependency across the yard (courtyard), these two detached buildings extend perpendicular off the back or western elevation of the mansion house.

The North Dependency is of masonry construction, largely covered by stucco, and is one room deep and three rooms across. This early nineteenth-century building appears one story in height from the yard of the main house, but on the backside it extends down to project a two-story height. On the front façade, the fenestration consists of three doors, with each door opening to a separate room inside. The simple pitched roof is covered in flat tiles with chimneys at either end.

A service road is located directly by the west elevation; the historic roadway circling the yard passes the front façade. Both of these elevations are devoid of immediate vegetation. The east elevation which is closest to the Mansion does have vegetation cover in front while the rear elevation has a tangle of vegetation and trees, and backs to a large stucco-covered restroom facility.

The North Dependency is a contributing building to the Arlington House, The Robert E. Lee Memorial National Register listing of October 15, 1966, the first year of the National Register of Historic Places. It is identified as the North Servant's Quarters-Arlington House in the NPS's List of Classified Structures (*see Appendix A*). The Management Category is "Must Be Preserved and Maintained" that dates to December 5, 1990. Under the current General Management Plan, the ultimate structure treatment is identified as "restoration."

## **Investigation History**

The current investigation is part of the third significant effort in the last seventy years to return the structure to its mid-nineteenth century appearance during the Lee family's presence and to also help tell the story of the slavery and African-American life at Arlington.

The first restoration campaign began with a “Joint Resolution of Congress authorizing the Restoration of the Lee Mansion in Arlington National Cemetery, Virginia,” (Public Resolution – No. 74—68<sup>th</sup> Congress) (H.J. Res. 264). The resolution was approved March 4, 1925, and reads as follows: “Resolved by the Senate and House of Representatives of the United States in Congress assembled, That the Secretary of War be, and he is hereby, authorized and directed, as nearly as may be practicable, to restore the Lee Mansion in the Arlington National Cemetery, Virginia, to the condition in which it existed immediately prior to the Civil War and to procure, if possible, articles of furniture and equipment which were in the Mansion and used by occupants thereof. He is also authorized, in his discretion, to procure replicas of the furniture and other articles in use in the Mansion during the period mentioned, with a view to restoring, as far as may be practicable, the appearance of the interior of the Mansion to the condition of its occupancy by the Lee family.”

As a result of the resolution, the dependency was restored in 1930 by the U.S. Army to what they believed to be its appearance immediately before the Civil War. An exhaustive study was not undertaken at the time and field investigations were inconclusive in some key components of the building’s appearance. For the next thirty years, the National Park Service (which acquired the park in the 1930s) opened Arlington to the public as a memorial to George Washington Parke Custis and his son-in-law, Robert E. Lee. Never entirely comfortable with the Army’s restoration of the structure, the NPS embarked upon a second investigation in the 1960s. Repairs and some alteration of the structure were undertaken as a result of the NPS research, but because of lingering uncertainties about the configuration and use of various rooms, the restoration of the North Dependency was cancelled; the spaces were closed to public view; and the building converted to storage and utilitarian uses. The west room would later be used as a gift shop.

In 2002, the National Park Service initiated the third major effort to understand the historic appearance of the North Dependency. The current effort builds on the archival information, remaining physical evidence, and complicated history of the two previous restorations. It has involved extensive onsite investigation in all but the west room. Today we have been able to include sophisticated computer technology in our study. It adds fresh insights into the building’s historic configuration based on new readings of the photographs and papers that have long been a part of the archival record.

Through our physical investigation, evidence of remaining paint, plaster, wood nailing blocks, and other clues of the past have enabled the investigating team to better understand the physical layout and circulation pattern of the building. The findings were wide range, including the remnants of grease and fragmentary bits of fibers embedded in the walls along the edges of the kitchen ceiling/upper floor line, the stratigraphy of historic paint colors revealing a surprising number of building features to be original, and wood lintels hidden behind layers of alterations, showing the position and size of original windows.

Information and material from different eras have been identified and evaluated to form an accurate picture of a building where the slaves at Arlington lived and worked. They tell the story of a structure, exceptional in many ways: from engaged columns and recessed arches, making this an especially ornate slave quarters, to exterior brick walls coated with a pebble-dash stucco, a remarkably early use of this masonry finish, to its unusual split-level plan.



The results of this investigative research and documentation are contained in this Historic Structures Report, which is arranged in the following manner:

**Introduction:** This section includes a general description of the property, a brief overview of restoring the Arlington House dependencies, project team members, the scope of the project, and the investigation methodology.

**Part I: Developmental History** (Historical Background and Context; Chronology of Development and Use; and Physical Description/Condition Assessment) for the Historic Structures Report on the Arlington House Dependencies in accordance with Cultural Resource Management Guideline NPS-28 (Release No. 5, August 1997). This section documents and analyzes historic information as it relates to the social history and physical evolution of the building and overall site. A detailed chronology of the North Dependency, including summarizations and references to historic documentation previously compiled by the federal government, as well as original information gathered by the current project team, is included in this section. In addition, it contains a description of the existing conditions, including annotated drawings using the measured drawings produced by HABS during the spring of 2002.

**Part II: Treatment and Use** (Ultimate Treatment and Use; Requirements for Treatment; and Bibliography) for the Historic Structures Report on the Arlington House dependencies in accordance with Cultural Resource Management Guideline NPS-28 (Release No. 5, August 1997). This section explores possible treatments and uses of the North Dependency.

### **Project Team Members**

Following the objectives of the George Washington Memorial Parkway, which requested the preparation of a historic structure report to cover the physical history and analysis of the North Dependency of the Arlington House: The Robert E. Lee Memorial, the following team of professionals was engaged: Charles E. Fisher, III, historian, Technical Preservation Services, National Park Service; Chad Randl, architectural historian, Technical Preservation Services, National Park Service; Kaaren Staveteig, architectural historian, Technical Preservation Services, National Park Service; John Volz, AIA, preservation architect, Volz & Associates, Inc., Austin, TX; George Fore, architectural conservator, George T. Fore and Associates, Raleigh, NC; Doug Reed, architectural conservator, Preservation Associates, Inc., Hagerstown, MD; and Richard Pieper, architectural consultant, Jan Hird Pokorny Associates, New York, NY.



Lead team members: Chad Randl, Kaaren Staveteig and Chuck Fisher

Assistance provided by the staff of the George Washington Memorial Parkway (GWMP) was invaluable to the study: Kendell Thompson, site manager, Arlington House: The Robert E. Lee Me-

morial; Andrew Wenehel, architect, GWMP; Tim Buehner, GWMP External Programs and Land Use; Malcomb Willoughby, facility management specialist, Arlington House: The Robert E. Lee Memorial; Karen Kinzy, historian, Arlington House: The Robert E. Lee Memorial; Colleen Curry, site curator, Arlington House: The Robert E. Lee Memorial; Catherine Weinraub, museum technician, Arlington House: The Robert E. Lee Memorial; John V. Stefaniak, woodcrafter, GWMP; Tim Marshall, maintenance, Arlington House: The Robert E. Lee Memorial; and Matthew Virta, historian, GWMP. Louis Berger Group, was hired by the GWMP to do the archeology. Luis Teran, NPS architectural engineer for GWMP, consulted on the condition of the roof.

### **Methodology**

The project team conducted an in-depth study of primary and secondary resources as well as field investigations. Primary textual resources include official and familial correspondence, Office of the Quartermaster General Cemetery Reports, National Park Service memoranda and reports, oral history accounts and historical narratives. Secondary sources including books and National Park Service reports were utilized primarily to provide additional context. Graphic resources include drawings, maps, and historic photographs. Material testing and destructive and nondestructive investigations were discussed with the project and site managers who provided approval in advance. Site visits were coordinated with primary park staff. Stucco and some paint samples were evaluated at the conservation lab in Lowell, MA under the direction of Peggy Albee, Manager of the Historic Architecture Program, NER/NPS.

Of necessity, the research is not concluded with the completion of this report. Rather, it will be supplemented in the future by further information gathered through archeological and architectural investigations, and by subsequent documents and information as they are discovered.



# Introduction

*Restoring the  
Arlington House Dependencies*

---





### **Restoring the Arlington House Dependencies**

Built by G.W.P. Custis, the North and South Dependencies are exceptional buildings that supported the Arlington Mansion at the time of residency of Robert E. Lee's family, prior to the outbreak of the Civil War. Commonly referred to today as the kitchen (North Dependency) and slave quarters (South Dependency), even by Lee, the more accurate description by function would be slave quarters (North Dependency) and storehouse (South Dependency). The North Dependency originally had five rooms, all but one were used as quarters for household slaves. In addition, the North Dependency housed the main kitchen for the Arlington Mansion, used all year around, for which Lee recorded its use in an 1859 insurance policy. One of the rooms in the South Dependency was the quarters of the Gray family, the most notable of the household slaves. Yet the other two rooms served as the general storehouse for meats and other foods, as well as for domestic supplies for the African-American slaves at Arlington.

Architecturally, the investigation undertaken as part of the preparation of this historic structures report clearly establishes three essential points.

- 1) The North Dependency was built sometime before the South Dependency. For a period of time after the South Dependency was constructed, the buildings were finished somewhat differently, including color. By the time of the residency of the Lee family, both buildings were finished on the outside to match each other.
- 2) Despite the age of the buildings, their numerous uses, periods of major neglect, and three major renovations, both buildings retain a relatively strong degree of historic fabric.
- 3) These two buildings are important in American architecture. The original interior plan of the North Dependency is extremely unique for its time and especially considering its function. Probably nowhere else in the ante-bellum South did such a plan ever exist in a similar building. As to the South Dependency, the location of a "smoke house" in an interior or center room of a building, adjacent to a room used as living quarters and the other a storehouse for clothing and other domestic supplies, is very unusual.

Also, both distinctive and quite significant is the historic rough cast stucco which has survived in large areas on the exterior. This particular stucco treatment represents perhaps the earliest surviving example of this finish in the United States. This original stucco also is important to understanding how the original stucco treatment on the lower walls of Arlington House appeared at the time of the Lee's residency.

In most preservation work on properties such as Arlington, attention to authentic detail and material conservation are components of restoration work on the main building, not dependencies. Yet the work on these two buildings in the twentieth century, first by the military and later by the National Park Service, reflects a strong preservation philosophy. For example, in the 1960s, the National Parks Service abruptly cancelled its plans to restore the interior of the North Dependency, being unable to untangle potentially conflicting evidence.

During the 1920s restoration campaign by the military to restore Arlington House and the two dependencies, the Quartermaster General's office that helped to guide the project instructed the Quartermaster Supply Officer as to the following:

The work . . . "should be carried out strictly with old methods, and every detail should be carefully supervised to avoid irreparable injury to work which must be preserved in its historic character."

While the military's restoration did make certain key mistakes in their restoration of the dependencies, they tried to keep to the spirit of the Quartermaster General's instruction. Attention to detail, good craftsmanship and care not to damage historic fabric—these are essential to any preservation work on the North and South Dependencies in the future.



# Part IA

## *Historical Background and Context*

---





Figure 1. An interpretive historic map of Fairfax County, Virginia in 1760 by Beth Mitchell which shows properties owned by the Alexanders. Edited by Donald M. Sweig. Published by the Office of Comprehensive Planning, County of Fairfax, 1987.

### 1778-1801

The tract of land on which the Arlington estate was built became part of the Custis-Lee legacy in 1778.<sup>1</sup> John Parke Custis, adopted son of George Washington, purchased the land from John and Gerrard Alexander. The property was close to his stepfather's estate at Mount Vernon and to his wife's childhood home at Mount Airy in Upper Marlborough County. The hilltop setting offered spectacular views along the Potomac River, and the prospect of cultivating the site's rich alluvial soil near the river and turning it into a profitable working estate was very appealing.

John, his wife, Eleanor, and two children moved into Robert Alexander's former house located near the mouth of Four-mile Creek in 1779. Unfortunately they only lived on the land for a short period of time. In September 1781, John traveled to Williamsburg to serve as a volunteer aide to George Washington, caught camp

fever and died.<sup>2</sup> In an effort to comfort his bereaved daughter-in-law, George Washington adopted the two youngest of their four children, George Washington Parke Custis (G.W.P. Custis) and Eleanor Parke Custis, and moved them in to live with him and their grandmother, Martha.<sup>3</sup>



Figure 2. "The Washington Family" by Edward Savage depicts George and Martha Washington with her two grandchildren, George Washington Parke Custis and Eleanor Parke Custis, 1796.

As a young boy, G.W.P. Custis followed his guardian around the Mount Vernon estate, listening to him talk with prominent visitors about issues pertinent to both the estate and the country. Washington frequently discussed the importance of good transportation routes to free the young nation from its dependence on Europe. He also believed that breeding hardier agricultural stock would promote the economic and political freedom of the country. As a grown man, G.W.P. Custis adopted these principles, experimenting with farming techniques and animal breeding.<sup>4</sup>



Figure 3. George Washington Parke Custis, a crayon likeness by Charles Fevret de Saint-Memin, 1805.

### 1803-1850

Upon reaching the age of 21 in 1802, G.W.P. Custis inherited over 18,000 acres of land and approximately 200 slaves through estate endowments from his father, John Custis, his grandmother, Martha Custis Washington, and his guardian, George Washington.<sup>5</sup> At that time, Custis moved from Mount Vernon to the overseers four-room cottage on the pocosin<sup>6</sup> of the Potomac River on the Arlington property.<sup>7</sup> The stay in this damp and unhealthy location was brief. Within a year, Custis and his young bride, Mary

Fitzhugh, began the construction of a new home on Mount Washington, the prominent and highest point on the 1,100 acres. Although larger than the overseer's residence, the house was humble compared to the later mansion. Of brick construction, the first floor of the two-story house had only three rooms.<sup>8</sup>

To improve the flat, rich plains by the river, G.W.P. sent his sixty Mount Washington slaves to restore the remnants of the previous tenant farm—fixing and building enclosures, clearing land of scrub growth and the river of snags. It was at this fertile location that Custis chose to cultivate a market garden, a large plot of land where crops were grown to provide fresh vegetables and fruits to nearby towns. This farm operation was a profitable venture in part because he took advantage of slave labor to improve transportation routes and with the close proximity to urban populations could thus deliver fresh produce in little time at less cost. However, it did not however, make the estate self-sufficient.

Of the extensive properties purchased by G.W.P.'s father in the mid-eighteenth century, the Custis family income was primarily generated by two estates, the White House and Romancoke, located about ten miles apart on the Pamunkey River in the central tidewater of Virginia. On the other hand, the Mount Washington estate (renamed Arlington shortly after Custis brought his wife home) was designed to be a Custis and Washington family showpiece.

When Custis was ready to design his grander home on the hill, he sought the assistance of a professional architect. George Hadfield, a brilliant, young English architect, had been in America only a few years at the time he first visited the site. A student of James Wyatt at the Royal Academy of Arts, Hadfield had been the only architectural student in forty years to win the Academy's annual gold medal award. With it went a traveling scholarship enabling him to study classical architecture in Italy for three years, during which he drew restorations of several ancient temples. When exhibited at the Academy in 1795, the restoration plans caused quite a sensation. Shortly after he returned to England, Hadfield accepted a position in America to take over the construction of the U.S. Capitol in Washington, DC. Unfortunately he became embroiled in controversies and was ultimately discharged.

Presumably Custis had Hadfield's plans of his new house and perhaps its outbuildings when he started construction, for there is no indication that any change was made in the design of the mansion after it was begun. That Hadfield designed the entire structure—not just the center section and portico—is indicated by the close resemblance of the windows in the wings to those found on other buildings from his drawing board, and to the fact that the wings are obviously designed to balance the massive portico.<sup>9</sup>

By 1804, Custis completed the two wings of what later became the Mansion. The work subsumed and extensively modified the original north building, his early home on the top of the hill. A large chimney breast of solid brick was constructed as part of the west wall flanked by doorways leading to outside steps. Near the chimney breast, an inside stairway went down to the kitchen and laundry in the basement. As protection from the weather, the exterior walls were coated with a stucco plaster, scored with lines, and tinted to resemble stone. The south wing, similar in size and shape, was divided into a large parlor and a smaller room on the south end for a study and office. A basement was located under the larger room. The floor level in the south wing was several inches lower than in the



north wing, necessitating an awkward step when the rest of the house was connected to the lower level. At the north end of the parlor was a great semi-circular arch, spanning the width of the room and touching the ceiling.

For fourteen years, the Custis family lived in the two brick wings, divided by an open yard approximately fifty-eight feet wide, probably connected by a temporary hyphen structure or walkway.<sup>10</sup> Due to a shortage of funds, the main block was not completed until 1818. Classical in style and designed to appear impressively large from a distance, the main block of the mansion reinforced the hierarchy of the estate. It is likely that the horse stable, the ice house, and the two surviving dependencies located immediately west of the mansion were completed around this time as well.<sup>10</sup> Custis' slaves are said to have done much of the preliminary work—leveling the site, digging



Figure 4. Arlington House, 1824, John Farley



Figure 5. Drawing of the south facade of the North Dependency found in a scrapbook belonging to a daughter of Lee, c.1850.

the foundations, and clearing the road down to the river.<sup>11</sup> By the time Custis completed the mansion and numerous outbuildings, the farm contained a market garden, crop field, pasture, fishery, and homes or quarters for approximately fifty slaves.

Formally aligned with the wings of the main house, the North and

South Dependencies were also classical in appearance and of brick construction. The elevations facing outward toward the formal spaces of the gardens were highly ornamented with engaged columns and recessed arches, reflecting design elements found on the main house. The elevations facing the work yard were relatively plain.<sup>12</sup> Similar to the farm and quarters below Arlington, the yard was at least partially the domain of the house slaves—a space appropriated through their many tasks. Historic images reveal that the work yard was screened by a row of cedar trees from the formal carriage turn-about in front of the house.<sup>13</sup>

In an insurance application prepared by Robert E. Lee in 1859, the North Dependency was described as “a one-story building with wood roof.”<sup>14</sup> The single-story, south facade had three doors placed at even intervals, each with an unusual painted panel framed above. “There were two basement rooms, one that was used by the coachman, Daniel Dobson, and the other served as a summer kitchen. The



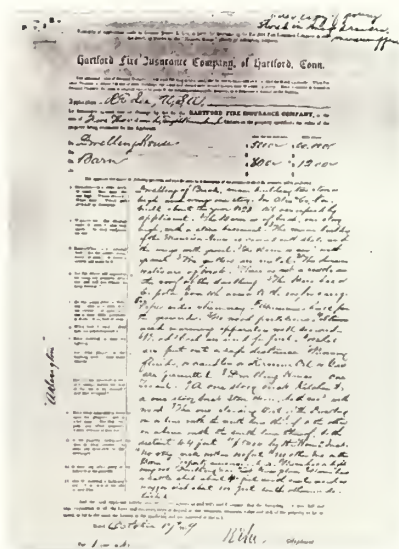


Figure 6. An 1859 insurance application prepared by Robert E. Lee describing the two dependencies

rooms above were sleeping rooms, occupied by Eleanor Harris, housekeeper; Aunt Judy, family nurse; Ephraim Derecks, gardener; and George Clark, cook.”<sup>15</sup> The west and east rooms were separated by a center room, entered at grade, that provided access to the upper end rooms and living space for the nurse, known as “Aunt Judy.”

An early description of the two principal structures within the yard was written in 1875 by Elizabeth Randolph Calvert, the granddaughter of Mary Randolph and a cousin of Mrs. Lee, as she remembered them in 1845. “Opening into this road at equal distances from the house, and as proportions will allow, are two long buildings consisting of three rooms each on one floor, the one of the east contains a kitchen and furnished homes for some of the house servants. The opposite one accommodates a storeroom, wash and sleeping rooms.”<sup>16</sup>

Though G.W.P. Custis was the owner of the property for all but four years of the Custis and Lee families’ tenure, other family members, hired employees and slaves managed and influenced the development of the estate in many ways. Mary Custis and Mary Lee each helped manage various elements of the property including providing for the physical and spiritual needs of the slaves. Paid employees like Austin Brahm directed the activities of the slaves in the market garden and fields. Marriages, births, and deaths of family members and slaves at Arlington also affected the development of the property. In June of 1831, Mary Randolph Custis, daughter of G.W.P., married her childhood friend Robert E. Lee.<sup>17</sup> Although a member of southern aristocracy through both the Lee and Carter lineages, Lee had little inheritance and limited financial resources. He cultivated strong emotional ties to the property even though throughout their forty year marriage, his military obligations as an army officer frequently kept him away from Arlington. In contrast, his wife, Mary Custis Lee, and their seven children spent considerable time at Arlington.

Records show that late in the tenure of the Custis and Lee families, five log cabins provided housing for many of the slaves. The exact appearance of the cabins is unknown. Two were located along the road that led west from Arlington Spring, at the edge of the Potomac River, to Arlington’s main gate off the Alexandria and Georgetown Turnpike. Other slave quarters were located near the estate’s collection of farm buildings which included a wheelwright’s shop, blacksmith, saddlery, poultry yard, carriage shop, granary, large feeding barn, and pump house.<sup>18</sup> Some of these buildings also housed slaves.<sup>19</sup> This wide variety of farm buildings was not unusual during the first half of the nineteenth century as many large landowners sought to be as self-sufficient as possible. More duties undertaken by the slaves meant that less cash outlay was required by the Custis and Lee families. Slaves on the estate included people who were multi-skilled in blacksmithing, animal husbandry, and the working of leather for saddles and other goods.

In addition to the market garden and fields, farm animals such as cattle, chickens, and hogs were also kept. Slaves also had family vegetable plots near their cabins to supplement their diets. By the 1840s,

the estate had a fenced orchard stretching to the south of the road, running from the overseer's house east to the Alexandria Canal. The overseer's house, Custis' original home when he moved to Arlington, was one of the few log structures on the farm. It was two stories with a porch that stretched across the back overlooking a yard and slave quarters. Fields with crops such as corn and rye were located to the north and south of the farm buildings. In 1850, the farm produced 200 bushels of rye, 900 bushels of Indian corn, 150 bushels of oats, 20 bushels of peas, 50 bushels of Irish potatoes and 30 tons of hay.<sup>20</sup> Unfortunately, land use and production levels at Arlington Farm were inconsistent. Crops were rotated, new crops were grown, and areas formerly uncultivated were cleared in cycles of native vegetation re-growth and crop tillage in an effort to increase productivity.



Figure 7. Detail from Environs of Washington map, c.1864 showing location of spring buildings.

Just to the east of the farm was an area which came to be known as Arlington Spring. Custis delineated the eight-acre site along the Potomac River with a fence. The site centered on a naturally fed spring flowing up from a rocky outcropping near an enormous oak tree. Custis developed the Spring as a place to hold his public sheep shearings and included benches, a kitchen building, and pavilion. There in 1811, he publicized his new native breed sheep, the Arlington Improved. Custis believed that by raising wool and making it into clothing on the plantations, Southerners could improve their lot and the fate of their slaves. Wool production would also check the steady deterioration of the land, as an over reliance on tobacco and cotton was exhausting southern farm lands. Though Custis' breed never gained widespread acclaim, the Spring became extremely popular as a day resort for people from surrounding areas to relax, picnic and dance. Beginning in 1843, the resort was physically separated from the Arlington farm by the construction of the Alexandria Canal and plans were carried out to further promote visitation at Arlington Spring through a building campaign. All structures were rustic, creating a sylvanian resort. Though slaves would sometimes serve the guests, free blacks were not permitted. Custis frequently visited with the Spring's patrons, sharing stories of George Washington and enjoying the role of host. The setting provided a gathering place for socializing among a primarily middle-class clientele.



Figure 8. Arlington Spring, from Benson Lossing, *Harpers Magazine* 1853.

### 1850-1865

Only during the few years that Lee was stationed near Arlington did he assist his wife Mary Custis and her father in overseeing the estate. In 1857 G.W.P. Custis died, just three years after his wife



passed away. Custis left considerable debt, a poorly maintained and unproductive Arlington estate, and much confusion over his intentions to free his slaves. Upon the death of his father-in-law, Robert E. Lee returned to Arlington to direct the development of the estate and sort out the will.

In his will, Custis directed the division of some of the property among his descendants, in particular he separated Arlington from the support of the White House and Romancock plantations. Eager to see his father-in-law's wishes fulfilled, Lee set about improving the farm and grounds with the help of his son, George Washington Custis Lee (who would ultimately inherit the property). Lee resurfaced the roof on the mansion, the stable, and the overseer's house, and also laid a new foundation for a barn. He fertilized the fields with lime, guano, and ground plaster, and also made improvements to the Arlington Mill, which he later rented out for additional income.<sup>21</sup> The buildings and grounds at Arlington Spring were improved for lease to a concessionaire in the summer of 1859. To increase the efficiency of Arlington, Lee rented out a number of slaves to other estates—at least one from every slave family.<sup>22</sup>

On April 17, 1861, as the state of Virginia succeeded from the Union, war came to Arlington House. At home, surrounded by friends and family, Robert E. Lee, officer of the United States Army for over thirty years, resigned from his federal post. Two days later, he accepted command of the Virginia forces and left Arlington never to return. Acceding to her husband's pleas, Mary Lee soon departed Arlington with her children, her dearest possessions, and a few of her slaves, leaving others behind to tend to the estate.

Arlington House, perched high on the slope overlooking the city of Washington, conformed to the ideals of the nineteenth-century picturesque family-seat. Unfortunately, this commanding prospect also met the strategic needs of the Union forces. On May 24, 1861, the Union army moved in and occupied the estate. Major General Charles W. Sandford, in charge of all New York regiments within the District of Columbia, established his divisional headquarters at Arlington House. Instead of moving into the mansion, he had three large tents erected between the house and the flower garden. The following day he issued a proclamation stating that all property taken for use by the federal forces in Fairfax county, in which Arlington was then located, would be protected and used only for suppressing unlawful acts against the Union. Preventing vandalism on the 1,100 acres of the estate proved more difficult as time progressed.

The slaves who worked primarily in the house, yard, and garden—including Selina Gray, George Clarke, Eleanor Harris, Perry Parks, Daniel, and Ephriam—and most of the slaves whose quarters were located on the farm portion of the estate, remained at Arlington.<sup>23</sup> Some assisted the federal soldiers with tasks such as washing and cooking, while others continued with agricultural work. On the farm, about fifty slaves remained in the quarters at least through 1862 and most likely continued to garden in their family vegetable plots.<sup>24</sup>

At the end of May of 1862, Brigadier General Irvin McDowell, in



Figure 9. Photograph of Selina Gray, Mrs. Lee's personal maid and housekeeper. She and her family lived in the South Dependency buildings for many years.

charge of the newly named Army of the Potomac, took over the tent headquarters erected by General Sandford. A telegraph line connecting Arlington with Washington was set up on wooden poles that descended down the estate's east facing slope. Within the woods to the north, south, and east of the mansion, thousands of soldiers bivouacked.<sup>25</sup>

General McClellan replaced General McDowell as Commander of the Army of the Potomac soon after the Battle of Bull Run (First Battle of Manassas). Since McClellan lived in Washington DC, McDowell remained at Arlington to preserve the estate from damage. That the estate remained in relatively good condition that first year—at least in the vicinity of the main house—was attributed to the care

given by the slaves. Of particular note was Selina Gray, identified by Mary Lee in her letter to General Sandford as “the woman in the yard.” She lived in the western third of the South Dependency with her husband and children during the residency of the Custis and Lee families. During the federal occupation, Selina worked to protect the inherited personal items that had belonged to George Washington and had been left behind after Lee's departure.<sup>26</sup>



Figure 10. In 1864 the yard west of the mansion was so trampled that little vegetation grew. Photo by Andrew Russell, U.S. Army photographer.

Following a long winter, in March 1862, most of McClellan's army departed for Fort Monroe to begin the advance up the peninsula toward Richmond. The only evidence of their occupation were the “blackened circles of campfires” that dotted the hillsides.<sup>27</sup> Although several thousand enlisted men remained on the heights to guard the federal Capital after McClellan's departure, the shift of the war campaign south slowed the intensity of activity at Arlington. Lower ranking officers and their families stationed at nearby forts moved into the mansion vacated by McClellan and his staff. The departure of the higher ranking officers that shared the social circles and personal connections with Lee and his family prior to the war led to neglect of the site. “All the boundaries, garden plats, and smooth reaches of green turf. . .were swept away and even gradually descending terraces were broken down and became ragged embankments.”<sup>28</sup> In fact, after the Union defeat at the Second Battle of Manassas in late August 1862, General McClellan ordered the Arlington mansion burned if the Confederates moved on Washington. But the southern forces retreated and the estate was spared.

On December 29, 1862, Lee, as executor of G.W.P. Custis's will, complied with a court order requiring that the slaves at Arlington—one hundred and eighty eight total—be given their freedom by January 1, 1863. Their departure from the estate was optional. Many that remained were among





Figures 11 and 12. Union soldiers quartered at Arlington in 1864, photos taken by Andrew Russell, for the U.S. Army. The yard and South Dependency are shown in the lower photograph.



the early residents of Freedman's Village, a community established in the southeastern section of the estate in May of 1863.<sup>29</sup> At least a few individuals spent the rest of their lives at Arlington, later working for the military cemetery that was established and providing insight into what the property was like before the war.

During the war, the barns, slave cabins, and other structures associated with the agricultural pursuits of G.W.P. Custis were taken over by the federal forces and utilized in support of the Arlington Stables. Large corrals and stables for military use were constructed, supplementing the existing early nineteenth-century buildings on the farm.

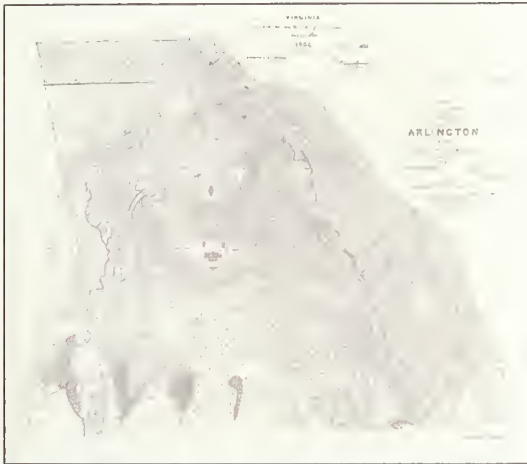


Figure 13. Map commissioned by General Montgomery Meigs in June of 1864, for the creation of the National Cemetery at Arlington.

Until 1863, Arlington was occupied by the federal government without legal title to the property. Mary Lee owned the land as direct inheritor of the estate of her father G.W.P. Custis. Shortly after McClellan's departure south in March 1862, Congress passed a law authorizing "the collection of direct taxes in the insurrectionary districts within the United States." Under this legislation, property owned by individuals loyal to the Confederacy within the boundary of the United States, such as the Lees, could be assessed federal taxes. If these taxes went unpaid, then the property would be forfeited to the government and put up to auction to be sold to the highest bidder. This law was amended in 1863, to wit "any such sale of any tracts, parcels or lots of land which might be selected under the direction of the President for govern-

ment use for war, military, naval, revenue, charitable, educational, or police purposes might be at said sale, be bid in under the directions of President and struck off to the United States." It was under the authority of this law that the United States government acquired ownership of the Arlington estate.<sup>30</sup>

On September 16, 1863, Mary Ann Randolph Lee was assessed approximately \$92.70 in taxes on property worth \$34,100.00, according to the 1860 census. She was allowed 60 days to pay. Mary, suffering from acute rheumatism, was unable to make the journey across enemy lines and so she sent someone else to make the payment. The person Mrs. Lee sent to make the payment was turned away. The taxes unpaid, Arlington was forfeited to the United States. On January 6, 1864, under the 1863 amended tax act, President Lincoln made an order directing a bid on the Arlington estate and subsequently acquired it for the United States for war, charitable, and education purposes. The property was purchased for \$26,800.00.



Figure 14. Arlington trees being cut down by Union soldiers, c.1861.

By late 1863, the primary federal burial ground in the city of Washington, the Soldiers Home, was

nearly full. Following an enormous loss of life in the Battle of Wilderness in early May 1864, the staff of the Quartermaster General's office was ordered to make an examination of all sites eligible for burials near the District. The Arlington estate was an immediate favorite. The mansion and the grounds adjacent to it were quickly appropriated for a military cemetery with 200 acres to be surveyed, laid out, and enclosed for this purpose. In 1865, the graves were concentrated in two areas—in the northeast corner of the property and just southwest of the house. The graves of 13,000 soldiers were marked with simple, wood headboards painted white with names written with black letters. Within three years, over 14,000 soldiers were buried at Arlington. By the end of the century, their numbers increased ten-fold.

Five years after the war, the former home of General Robert E. Lee, a hero of the South and a man esteemed by many in the North, was almost empty—its once grand rooms were used for storage and to house cemetery workers. Monuments to the dead stood nearby in the garden bordered on two sides with graves of Union officers. In an effort to recognize the unknown war victims, the Tomb of the Unknown Soldier was erected. Sealed in 1866, it contained the remains of 2,111 unknown soldiers from the battlefields of Bull Run and the Rappahannock River.<sup>31</sup>

Although a battle never occurred on the soil of Arlington, the use of the estate to house and train Union soldiers during the four and one half years of the Civil War caused the destruction of fences, forests, and buildings, and the deterioration of gardens, fields and roads. The yard west of the mansion was so trampled that little vegetation grew. Instead, the firm earth spread almost smoothly to the trunks of the scattered trees. All the buildings were worn. Dampness that siphoned up from the soil during the rainy season and dust that blew in dry weather alternately clung to the foundations. The stucco walls were chipped, revealing the masonry beneath. The agricultural buildings on the farms, the picturesque kitchen and pavilion of G.W.P. Custis's Arlington Spring had been modified by the army to serve specific functions during the war; some had been dismantled for lumber. The overseer's house, where Custis had lived in 1802, also suffered damage. It had been surrounded by temporary structures and the modified agricultural buildings that contained the horse corral and veterinary facility of the Union Army. Following the war, the enormous corral and the structures that could not be used were removed. The remaining buildings were later incorporated into Freedman's Village.



Figure 15. Plan of Freedmans Village.

Eventually the appearance of Arlington Cemetery and the privately held farmland surrounding the federal property improved. The land of the former Arlington Estate outside of the cemetery to the east, west and south of the mansion, remained a military reservation and was used for experimental agriculture.



The legislative mandate of the Freeman's Bureau, which established Freedman's Village in 1863, expired in 1868. As in villages of freed slaves elsewhere, steps were taken to remove the inhabitants and their homes from Arlington. Due to ensuing controversy, however, residents of Freedman's Village were allowed to remain. An inventory of the residents, buildings, and other improvements was made and the individuals were allowed to purchase their homes. The federal government retained ownership of the land, in addition to the right to evict residents with little notice.<sup>32</sup>

### **1866-1885**

Between 1866 and 1868, approximately 400 acres of land—property outside the boundary of the National Cemetery, but within the original boundaries of the estate—was divided up into parcels averaging ten acres each and rented to the Freedman's Villagers in an attempt to increase financial autonomy.

Former slaves of Arlington, including Martha Smith, Daniel Richardson, Margaret Taylor, and Lawrence, James and William Parks, lived in the village and on the scattered ten-acre farms. Only one family, the Syphax family, claimed legal ownership of the land, a seventeen-acre triangle cut out of the southern border of the original estate.

As additions were made to the cemetery and with the burial of highly-esteemed Union officers on the slope east of Arlington House, changes were made to the existing structures. The house (including the west elevation, which was covered with stucco for the first time after the Civil War) was repainted a light yellow in 1867. Later, new slate roofs were added to both the South and North Dependencies, the stables, and the wings of the mansion. A new greenhouse and a potting building were constructed in the eastern half of what had been the kitchen garden area.

In March 1883, the United States was given clear title to Arlington. This property, which had been willed to Mary Lee by G.W.P. Custis for use during her lifetime, was to be inherited by her oldest son George Washington Custis Lee upon her death. The property therefore had been a life estate in Mary Lee's name only. Upon her death, her son began his suit against the federal government for the return of Arlington. Bills were introduced in Congress both for and against restitution. Finally, in 1882, the case was decided by the Supreme Court. The federal acquisition of the property during the Civil War was deemed a taking without just compensation and therefore illegal. Custis Lee was paid \$150,000.00 to settle the debt.

With the estate now firmly in federal hands, the breakup of Freedman's Village was inevitable, for according to the Regulations of the Army, "No civilian will be permitted to reside upon a Military reservation unless he be in the employ of the government . . . no permission will be given any one to cultivate any portion of a Military reservation."<sup>33</sup> In the years immediately following the Supreme Court decision, attempts were made to remove the freed men from the village and surrounding farms. After much resistance from the residents, displacement efforts ceased. An inventory of the village and surrounding agricultural properties, detailing the existing structures and improvements, showed 763 individuals living on the former Arlington estate outside the boundary of the cemetery. They had improved their individual lots by adding trees, vines, houses, and outbuildings. Eight agricultural buildings and slave quarters remained from the G.W.P. Custis era. These structures were located near the eastern edge of the property where the farm and market gardens had once been. Custis' former slaves, unlike the other Freedman's Village residents, did not have to pay rent. A sum

of \$15,000.00 was appropriated by Congress to reimburse the renters and to cover the estimated cost of removal of the buildings and improvements. Many of the buildings were relocated.

### 1886-1928

With the disbanding of Freedman's Village in 1888, the acreage devoted to cemetery use increased. The construction of electric rail lines during the early 1890s, coupled with cessation of tolls on the bridge from Georgetown across the Potomac, exponentially increased tourism to Arlington Cemetery. In addition, throughout the nineteenth-century the use of cemeteries as public parks for picnicking and contemplating nature gained social acceptance.

During this time, public lavatories were also constructed to the immediate north of the North Dependency. By 1904, the North Dependency was serving as a laborer's cottage. Newspaper articles and travel guides indicate that the main house functioned as a cemetery office and as quarters for the superintendent of the cemetery.



Figure 17. The south elevation of the North Dependency, pump and yard, c.1900.

adjacent buildings to their appearance prior to the Civil War in honor of General Robert E. Lee. Architect for the Quartermasters Corps of the War Department, Mr. L.N. Leisenring, was to direct the restoration.

Early in the planning stage, it was clear that the restoration work would not adhere strictly to the Congressional request that the house be returned to its appearance immediately before the war. Instead, under the watchful eye of the former secretary of the McMillan Commission and current president of the Commission of Fine Arts, Charles C. Moore, the restoration was guided as much by contemporary aesthetics as historical accuracy. The Commission of Fine Arts (CFA) had been created in 1910 by President Taft to review proposed developments in the District of Columbia, assuring that new designs and changes to existing conditions conformed to the McMillan Commission

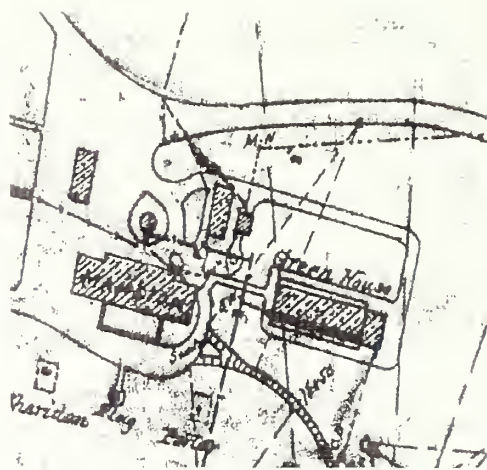


Figure 16. Enlargement of 1894 map showing water tower, public lavatory, and greenhouse that existed in close proximity to the North Dependency.

The stable to the west of the yard, built under the direction of Custis, was destroyed by fire in July 1904. The reconstructed stable was built of a style very similar to the original, with a Doric columned portico, symmetrical wing form and stuccoed walls.

After World War I, interest in returning Arlington to a pre-Civil War appearance and creating a public house museum gained momentum among the public and Congress. Congress authorized the Quartermaster General's office to restore the mansion and



Plan. The landscape of Arlington House, visible from Washington and a focal point within Arlington National Cemetery, was within their purview.

In October of 1925, Charles Moore visited President Calvin Coolidge to discuss the plans for Arlington House. The *New York Times* reported soon after that the plan of “creating a shrine in the memory of Robert E. Lee in the restoration of the Lee Mansion in Arlington National Cemetery probably will be dropped . . .” Following Moore’s visit, to President Coolidge, it became known that an entire change of base with regard to the project virtually has been determined upon. The mansion will be restored, not in the decorative style it had been when occupied by General Lee, but in the period style of the earlier years in which it was occupied by members of the Custis family. “There is no real demand from the South that a Lee shrine be established in Arlington Cemetery,” Moore declared.<sup>34</sup>

According to the Commission, Arlington was “one of the famous buildings of the early days of the Republic in Washington” and the furnishings, architecture and landscape were to reflect this ideology.<sup>35</sup>

After much debate, plans went forward. The restoration of Arlington House and the grounds immediately surrounding were placed under the jurisdiction of the Quartermaster General of the War Department, with immediate supervision by Colonel Charles G. Mortimer. All facets of the project were subject to the approval of the Commission of Fine Arts. According to the local papers, it was the first project of its kind ever undertaken by the War Department.

### 1929-1933

In 1929, Congress appropriated \$90,000.00 to fund the “continuing restoration of the Lee mansion and the procurement of furnishings . . . subject to the approval of the Commission of Fine Arts.” The Quartermaster General’s office established a committee to oversee the restoration and conduct hearings. The committee interviewed witnesses who could share information about the history of the house, its appearance, function, and furnishings, and issued a report with treatment recommendations for the mansion and two outbuildings. Members interviewed former slaves including Jim Parks, son of the cook who lived above the summer kitchen in the North Dependency, and the two daughters of Selina Gray, Mrs. Emma Syphax and Mrs. Sarah Wilson, who grew up in the South Dependency.

The Gray sisters reported that all of the cooking, winter and summer, was done in the North Dependency and that their younger brother, trained by Mrs. Lee as a house servant, brought the dishes over to the mansion.<sup>36</sup> They recalled there was a large spit in the kitchen and an old-fashioned oven. They

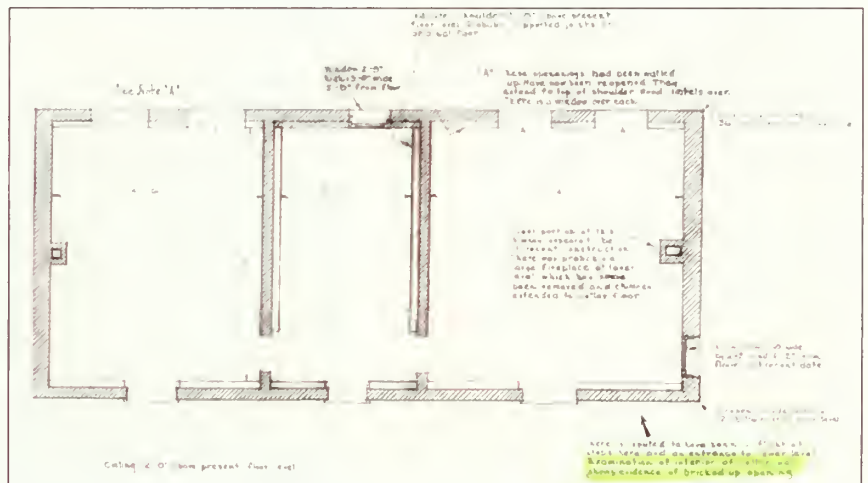


Figure 18. Drawing of the North Dependency produced by the Quartermaster General’s office sometime in 1929 as part of the restoration planning.





Figure 19 (above). South elevation of the North Dependency showing the QMC's restoration program where entry into the two outer rooms was down exterior stairs.

Figure 20 (right). The reconstructed summer kitchen in 1934 used elements found in a house in Baltimore.

Figure 21 (below). The reconstructed room above the summer kitchen where the cook once lived.



both distinctly remembered seeing the old cook beating Maryland “beaten biscuits” on the biscuit block. They also remembered two tables, one at the side of the room and one against the wall. They stated that “the steps to the kitchen came in from the outside, cat-a-corner, at the entrance nearest the house” and that the other house servants lived in this building. The field slaves rarely came around the house. The Gray children were the only slave children allowed around the house. Uncle Ephraim, the gardener, lived in the upper level of the east room along with the cook, Uncle George. Aunt Eleanor Harris, the housekeeper, slept upstairs above the west room, while Uncle Daniel Dodson, the coachman, lived in the lower level, where according to the Gray sisters he often cooked. Aunt Judy, the nurse, “who was much respected by all,” lived in the center room downstairs. They stated that there were no entrances on the other side of the building (north). They also remembered a big table in the center of the kitchen as well as one at the side and one against the wall. Jim Parks stated that the kitchen was down “below” and that his father (the cook) and an assistant cook slept in the level above the kitchen. He also described the north elevation as having two entrances. (This conflicts with the Gray daughters who asserted that there were no doors on the north cellar).<sup>37</sup>

Although the Quartermaster General’s office advised that the restoration work be carried out strictly using old methods and that every detail be carefully supervised, it was clear that they grappled with questions of interpretation and came to make a number of bold decisions about how the Mansion and the North Dependency would be restored. Their approach is evident in CFA’s request to change the mantels in some of the interior rooms of the Mansion from those present in the time of Lee to the original mantels. Their rationale was that the existing Victorian mantles were not part of the “original fabric” and that their replacement with colonial examples would “preserve the old lines of the fire-places.”

Though it was known that a circular drive existed behind the Mansion in the era of the Lees, it was difficult to manage visitors on the site with such an arrangement and so the planners recommended its removal.

By 1932, restoration work was almost complete. The North Dependency interior had been converted to a two-level configuration with a reconstructed summer kitchen. All interior spaces were interpreted to reflect the lives of the slaves who lived and worked there. Although little was known about the design, the summer kitchen had been reconstructed in the lower level of the North Dependency using hardware salvaged from an eighteenth century house in Baltimore.<sup>38</sup>

On June 10, 1933, the management of the “Lee Mansion” and the two dependencies was transferred from the War Department to the Department of the Interior. This was pursuant to Executive Order 6166, which transferred all parks, monuments, and reservations under federal administration to the newly named Office of National Parks, Buildings, and Reservations (later to be known as the National Park Service). Because Arlington National Cemetery was used for active burial, it remained under the jurisdiction of the War Department. The executive order that recorded the transfer, however, did not specify the boundaries of the area pertinent to the administration and protection of the buildings. The transfer met with public protest. Many feared it would lead to petty conflicts of authority and questioned the Park Service’s ability to handle a historic landmark.

### **1934-1957**

Upon the transfer of Arlington to the National Park Service, NPS Assistant Historian Elbert Cox



interviewed Leisenring and Moore of the Quartermaster Corps to learn the details of the Army's restoration. Cox concluded that a thorough study and complete search for historical data had not been made and that justification for various improvements was not always founded on solid evidence.

Early in 1934, the large, circa 1880 greenhouse was removed from the kitchen garden, but the brick potting-house remained in the northeast corner of the garden space. A restoration of the kitchen garden was undertaken. By the summer of 1934, perennial and annual flowers were planted around the outside borders. Vegetables, bulbs, and young seedlings were growing within the perimeter. By the winter of 1935, the restoration of the garden was complete.

According to NPS records, over one million people viewed the newly restored building and landscape during the summer of 1936.<sup>39</sup> Down the slopes from the house, on the former fields of the Government Experimental Farm, the Army constructed the South Post of Fort Myer. Meanwhile, only basic upkeep occurred on the grounds immediately surrounding Arlington House.

By the end of the Second World War, the grounds of Arlington House again required attention. The legislation that transferred the mansion and two dependencies from the Department of War to the Department of the Interior was revisited.

Jurisdiction over and management of the grounds were confusing. In 1947, it was determined that the executive order pursuant to the 1933 transfer could be construed to allow for the transfer of enough land to maintain the structures and interpret the site as a national memorial. The phrase "enough land" was determined to take in the land of the kitchen garden, including the potting building and the yard area. It did not include the comfort station and the land upon which it sat, near the North Dependency, nor did it include the flower garden south of the mansion. In total, only 2.374 acres were transferred in fee simple to the NPS.



Figure 21. The west corner along the south elevation of the North Dependency as restored by the National Park Service in 1964.

By the early 1950s, visitation increased. In order to better interpret Robert E. Lee's story, Murray H. Nelligan, one of the first historians employed at Arlington House, wrote a comprehensive social history of the Custis and Lee families from the eighteenth century to their departure at the beginning of the Civil War. A museum was created in the early 1950s to display artifacts associated with their lives at Arlington.<sup>40</sup> In 1955, the Lee Mansion was officially designated as the Custis-Lee Mansion to avoid confusion with Stratford Hall, the birthplace of Robert E. Lee.<sup>41</sup>

### **1958-1964**

In the spring of 1959, a bill was introduced to extend the ground of the Custis-Lee Mansion to allow for the "completion of the physical layout of the mansion . . . representing a continuation of

the plans of the Quartermaster General.” On August 18, 1959, the land encompassing Mary Custis and Mary Lee’s flower garden was transferred from the Department of War to the Department of the Interior.

Never satisfied with the U.S. Army’s restoration, especially of the North Dependency, the NPS undertook its own restoration program beginning in 1958. The scope of work for the North Dependency included major restoration and reinterpretation. Before proceeding however, they documented what the Army had done with photographs and drawings. Four years later, new drawings were completed reflecting a change in programs resulting from evidence found during the NPS investigation. In 1964, the interior restoration of the North Dependency was effectively cancelled. Interpretation of these spaces was discontinued and the rooms reverted to single levels and utilitarian functions, serving as spaces for the bookstore, storage, and a dressing room.

### **1965-2004**

In the early 1960s with the introduction of the tour bus system to Arlington National Cemetery contributing to the unprecedented increase of visitation, plans began to address issues of resource protection and interpretation. In 1966, the NPS created a master plan for the Custis-Lee Mansion. Four major factors contributed to the specific objectives of the plan. First, there was an increase in understanding and regulation of historic resources with the passage of the Historic Preservation Act in 1966. The passage of this legislation encouraged the NPS to focus on historically significant properties through the allotment of additional funding toward their preservation. Secondly, the NPS responded to nationwide increases in visitation and limited funding with “Mission 66,” a ten-year program to upgrade park facilities and improve resource management. Thirdly, across the country, the theories of living history interpretation and their basis in the rise of material culture studies generated an increased focus on recreating settings in order to tell specific stories. Tours of house museums led by costumed guides, for example, became common in parks. Lastly, a master plan was produced to guide management of the Custis-Lee Mansion. As the mission statement of the 1966 Master Plan read, “The interpretation and restoration programs at Custis-Lee National Memorial will provide the visitor with a moving personal experience leading to a clear understanding of R.E. Lee and his place in American history.”

Through legislation introduced by Representative Broyhill in 1972, the name of the Custis-Lee Mansion was legally changed to Arlington House: The Robert E. Lee Memorial. In May 1975, pursuant to the Federal Property Administration Services Act of 1949, the NPS agreed to assume the preservation and management of the forested area located west of the mansion. The kitchen garden was replanted with vegetables. Fruit trees and shrubs were also planted, including raspberries, gooseberries, currants, pears, cherries, and plums.

During the 1980s, the varied jurisdiction of the site continued to affect its development. In 1981, the lavatory building or comfort station immediately north of the North Dependency was transferred to the NPS. The land where the comfort building was located, however, was retained by the Department of the Army and leased to the NPS under a renewable five-year permit. The administration building, a reconstruction of the 1904 stable, was transferred to the National Park Service, while the parking lot and nearby structures remained under Department of the Army ownership.

In the 1990s, the use of Section 29, the forested area west of Arlington House first set aside for preservation in 1964 by the Secretary of War, was reconsidered as space for burials. Officials of the Department of the Army, realizing that the current land of the Arlington National Cemetery would be at burial capacity within ten years, approached NPS officials with a proposal to allow burials in portions of the wooded areas that could be determined not to have historical significance or archeological resources. On February 22, 1995, the Department of the Interior and the Department of the Army signed an interagency agreement to transfer portions of Section 29. A Cultural Investigation Report was written, in compliance with the National Environmental Policy Act and in satisfaction of the requirements of Section 106 of the National Historic Preservation Act and other legislation. The report detailed the existing cultural resources within the primarily wooded 24.44-acre parcel. A draft assessment was developed based on the Cultural Investigation Report and the environmental issues regarding the site. Released for public review in June 1999, a decision on the land transfer is still pending.<sup>42</sup>

Few changes have been made to the two dependency buildings since their restoration in the late 1950s and 1960s.



## End Notes

<sup>1</sup> The deeds were recorded in Records of Fairfax County, Liber N, 223, 226.

<sup>2</sup> George Washington Parke Custis, *Recollections and Private Memoirs of Washington*, with a memoir of the author by his daughter, and notes by Benson J. Lossing. New York: Derby & Jackson, 1859, 254f., 504f. According to a contemporary report, Jack contracted camp fever while visiting a British hospital. Letter by Mrs. Ann Dulany, circa November, 1781, quoted in Kate Mason Rowland, "Maryland Women and French Officers," *Atlantic Monthly*, LXVI (Nov., 1890): 654.

<sup>3</sup> Custis, *Recollections*, 254f.

<sup>4</sup> Custis adopted Washington's concern about the lack of an adequate breed of sheep that would provide a fine grain wool to compete with the merino wool coming out of Europe. Custis' wool production took an even more prominent form in his annual sheep shearing at his resort called Arlington Spring.

<sup>5</sup> This 18,000 acres includes approximately, Mount Washington/Arlington House (1,100 acres), Washington Forest Tract (1,200 acres), Monockin and Smith's Island (6,000 acres), Romancoke (4656 acres), White House (5,000 acres), and Arlington on the Eastern Shore (537 acres). For lists of inherited slaves see, *The Papers of George Washington Volume 6 Colonial Series*, W. W. Abbot, editor "Schedule A: Assignment of the Widow's Dower." (Charlottesville: University Press of Virginia, 1983-1995): 217-220; Prussing, Eugene Ernst. *The Estate of George Washington, Deceased*. (Boston: Little Brown and Company 1927): 448-459.

<sup>6</sup> Reclaimed marshland.

<sup>7</sup> This house is most likely the house identified by a 1746 map of the Howsing tract as belonging to a tenant of Gerard Alexander during the period of time in which the map was created. Howsing Tract Map surveyed by Daniel Jennings 1750; Tract map dated March 31, 1746, copy. Surveyor Jeremiah Hampton et. al. George Washington Memorial Parkway Headquarters. Natural Resource Map Files, Turkey Run, Virginia.

<sup>8</sup> This structure was altered during the construction of the southern wing, so that the wings of the buildings matched. It has been suggested that the building materials for Arlington House were taken from the site. This is difficult to prove. Murray H. Nelligan, *Arlington House: The Story of the Robert E. Lee Memorial*. (Burke, Virginia: Chatelaine Press, 2001): 74.

<sup>9</sup> English architect George Hadfield's obituary in 1826 stated that he was the designer of the Arlington House. He came to the United States in 1795 to serve as superintendent for the construction of the Capitol Building in Washington, but was dismissed in 1798 after difficulties with the commission overseeing the work. Obituary of Hadfield. *Daily National Intelligencer* (February 13, 1826). No plans of Arlington House, as drawn by George Hadfield, have ever been discovered.

<sup>10</sup> Since the foundations of the dependencies are similar to those of the north wing, earlier investigators suggest that they were built concurrently, some time before 1818. Paint studies done in 2003 indicate that the North Dependency was constructed before the South Dependency by a number of years and that the South Dependency was not painted initially to match the North Dependency.

<sup>11</sup> In 1807 on the Washington Forest tract, an 1,100-acre forested property along Four Mile Run, Custis began construction of flour and saw mills. These were custom mills, small scale business ventures serving only the needs of the Custis properties and people in the immediate area. During his life, Custis would sell off land lots of timber from the Washington Forest Tract to supplement his income.

<sup>12</sup> A drawing of the south elevation of the north building was found in a scrapbook belonging to one of Lee's daughters, dated c.1850.

<sup>13</sup> Image of east façade of Arlington House, 1864 Civil War photograph of Washington and Virginia in the A.J. Russell Album, 1861-1865. RG 64. National Archives. Cartographie Branch, College Park, MD. Interview with James Parks, former slave at Arlington. Transcript circa 1925 – ARHO.

<sup>14</sup> Nineteenth century insurance records denoted that the height of a building be based on the height of the front façade; the front of the north building is one story, the back is nearly two stories.

<sup>15</sup> Emma Syphax and Sarah Wilson, interview by Major Luther M. Leisenring, December 16, 1929.

<sup>16</sup> Elizabeth Randolph Calvert (1833-1911). "Childhood Days at Arlington Mixed with After Memories." Undated handwritten manuscript (circa 1870).

<sup>17</sup> *Alexandria Gazette*, July 6, 1831.

<sup>18</sup> This description is based on a variety of sources including the Insurance Policy for Arlington House written by Robert E. Lee, dated 1859; U.S. Census Bureau Records 1850; and the 1860 Agricultural Census, Alexandria County, Virginia. This map, part of a land survey undertaken during the Civil War, documents the locations of Arlington farm buildings by indicating former use of Civil War army structures confiscated by the Federal Army. *Environs of Washington Map* (1864). National Archives, RG77.

<sup>19</sup> John Vlach, *Back of the Big House, The Architecture of Plantation Slavery*. (Chapel Hill: The University of North Carolina Press, 1993): 34-37.

<sup>20</sup> 1850 Agricultural Census, Alexandria County. National Archives. Washington, DC.

<sup>21</sup> Lee to W.H.F. Lee, August 7, 1858, in Jones, *Reminiscences*, 377f.; same to Mrs. A.M. Fitzhugh, November 20, 1858, Lee MSS, Duke University.

<sup>22</sup> Such an upheaval in the relatively stable familial relationships within the slave community at Arlington, perhaps coupled with increased demands, resulted in a number of slaves running away between 1858 and 1861.

<sup>23</sup> Major General Charles W. Stanford. May 25, 1861 as quoted in *The History of the Seventh Regiment*.

<sup>24</sup> Fred W. Conklin to "Charley." December 16, 1861. ARHO. Robert Goldthwaite Carter, April 25, 1862 as quoted in *Four Brothers in Blue* (Washington, Press of Gibson Bros., Inc., 1913).

<sup>25</sup> "Our Camps and Strongholds," *Frank Leslie's Illustrated Newspaper*. (New York). June 15, 1861.

<sup>26</sup> Most of the Washington relics left in the house at the time of the Lee family's departure were taken by the Federal authorities and placed in the Patent Office for the duration of the War. After the War, Mary Lee unsuccessfully sued the federal government for their return. Rose, Ruth Preston. "Mrs. General Lee's attempts to regain her possessions after the Civil War." *In American History Magazine*. October 1978.

<sup>27</sup> Edward Dicey. *Six Months in the Federal States* (London 1863). 16-18.

<sup>28</sup> Karl Decker and Agnus McSween. *Historical Arlington*. (Washington DC: Decker and McSween Publishing Company, 1892). 61; See also Dicey Edward, entry for March 1862.

<sup>29</sup> Freedmans Village was established under the authority of the Department of Army. Numerous Freedmans' camps were established on both sides of the Potomac River. The first camps were constructed to deal with the influx of former and fugitive slaves into Washington. These camps quickly became over-crowded and proved unhealthy. The former Arlington slaves who were heads of households at Freedmans Village at Arlington during the first years of its establishment, included Margaret Taylor, Austin Brannen, Lawrence Parks, William Parks, Martha Smith, James Parks, Daniel Richardson, Bettie Taylor, Sallie Norris, Lousia Bingham, and members of the Syphax family. Valuation of Property Holdings of Freedman's Villagers, Heads of Family and Owner of Improvement. From Records of the Assistant Commissioner for the District of Columbia for the Bureau of Refugees, Freedman and Abandoned Lands 1865-1869, in Arlington Archives. Also see National Archives.

Microfilm Publication. M1055 Roll 21. Miscellaneous Reports and Lists.

<sup>30</sup> Libel of Information filed in United States v. All the Rights, Titles of Robert E. Lee etc., February 1864.

<sup>31</sup> Eighteen years later the Temple of Fame was erected from the stone columns, entablature, and frieze discarded from the U.S. Patent Office. One year later, the names of several Civil War heroes of the Union Army were engraved into the frieze around the domed roof and onto the columns.

<sup>32</sup> By the time the village disbanded in the late 1880s, it was the oldest Freedman's Village in the country. Reidy, Joseph. "Coming from the Shadow of the Past: The Transition from Slavery to Freedman at Freedman's Village, 1863-1900." *The Virginia Magazine of History and Biography*: 408.

<sup>33</sup> Official web page of Arlington National Cemetery. <http://www.arlingtoncemetery.org/>

<sup>34</sup> "Lee Memorial Plans to be Dropped." *The New York Times*, October 26, 1925.

<sup>35</sup> Commission of Fine Arts meeting minutes, March 22, 1903. CFA archives.

<sup>36</sup> Emma Syphax and Sarah Wilson, interview by Major Luther M. Leisenring, December 16, 1929.

<sup>37</sup> Army interview with Jim Parke.

<sup>38</sup> The interior of the summer kitchen was re-excavated as it had been filled in sometime earlier.

<sup>39</sup> Harper L. Garrett, Assistant Historian. United States Department of the Interior, National Park Service. May 18, 1936.

<sup>40</sup> "Museum Planned as Adjunct to Lee Mansion." *Washington DC Evening Star*, April 18, 1950.

<sup>41</sup> Statement of Representative Joel T. Broyhill of Virginia before the Library and Memorial Subcommittee, Committee on House Administration in Support of HR 10595, April 11, 1972. Copy in ARCH Archives. House Joint Resolution 274. 84th Congress, a resolution paying tribute to Robert E. Lee introduced by Joel T. Broyhill, Representative from Virginia.

<sup>42</sup> "National Park Service, Briefing Statement for the House Subcommittee Hearings, George Washington Memorial Parkway, Section 29 Land Transfer to Arlington National Cemetery, January 20, 2000. Garrow, Patrick H., Heather Mills, Jeff Holland, Todd Cleveland, and Bill Nethery. *Cultural Investigation at Section 29 Arlington House: The Robert E. Lee Memorial*. U.S. Army Corps of Engineers. (North Carolina Garrow and Associates, Inc.) September 1998.





## Part IB

### *Chronology of Development and Use*

---



### Original Construction to 1850

The existence and early configuration of the North Dependency is first referenced in an 1875 manuscript written by Elizabeth Randolph Calvert about her trip to Arlington in 1845. The granddaughter of Mary Randolph and cousin of Mrs. Lee, Ms. Calvert wrote: "Opening into this road at equal distances from the house, and as near as proportions will allow, are two long buildings consisting of three rooms each on one floor, the one of the east contains a kitchen and furnished homes for some of the house servants . . ."<sup>1</sup> Although the date of original construction is unknown, early investigators have speculated a construction date of the North Dependency to match that of the wings, known to have been built between 1802-04.<sup>2</sup> In a more recent investigation, bricks original to the construction of the North Dependency were identified within the north wall with whitewash and soot marks indicating that they had been reused from an earlier structure. If they were removed from the north wing during its remodeling, they may not have been available for reuse until the completion of the Mansion which dates to 1818. A conservative estimate of the initial construction date therefore would fall between 1804 and the 1820s.

Few records exist concerning the early history of this structure. Its engaged columns, arches, and cornices were clearly designed to reflect and complement the architecture of the adjacent Mansion and mirror the South Dependency across the U-shaped courtyard which was built afterwards (Figure 1). The exterior dimensions and location on the site are presently the same as when originally built. Oral histories of former slaves that lived at Arlington, compiled by the Quartermaster Corps (QMC) in the 1920s, extend our understanding of the building back to the 1850s. The earliest known drawing of the building found in a scrapbook owned by one of Robert E. Lee's daughters dates to c.1850 (Figure 2), while photographs provide information from the 1860s.



Figure 1. South elevation of the North Dependency, 2003.



Figure 2. South elevation, A c.1850 drawing that shows three doors at grade, cornices and painted panels above the doors, two chimneys, an exposed masonry foundation bisecting the door openings, and a recessed arched niche on the east elevation. The building probably changed little between its original construction and its appearance in the drawing.



## Exterior

The North Dependency is approximately 20' x 40', oriented with the roof ridge parallel to the roof ridge of both the center section of the Mansion and the South Dependency.

From the yard side (south elevation), the North Dependency exterior is clearly designed to appear as a single-story structure, yet the north elevation with upper and lower-level windows was articulated as a two-story building (Figure 3). The North Dependency bears a general resemblance to the Mansion in architectural style and construction. Engaged columns, arches, and cornices were clearly designed to reflect and complement the architecture of the main residence. Physical investigation suggests that the North Dependency was originally constructed with its wood embellishments (spindles, capitals, vents, and skirtboards) in place, though various individual pieces were replaced in-kind over time.



Figure 3. North elevation, 2003. Grade changes and window infill help conceal the historic two-story appearance of the facade.

The exterior walls and the two interior structural walls that divide the building into three sections date to the original construction. The 8" to 9" thick upper walls are brick with random voids. Bricks throughout are soft-fired and lack dimensional uniformity. The recent investigation revealed that some of the brick original to the building's construction had been reused from an earlier structure (assorted bricks had whitewash, others had soot marks suggesting an earlier use in a hearth or chimney). The brick walls rest upon a stone foundation approximately 1'-6" wide that extends approximately 5' above grade on the south elevation. The foundation was probably exposed originally, with an appearance similar to its current configuration. More of the masonry foundation was exposed on the north elevation due to sloping site conditions. Both the upper brick and lower stone sections of the walls were laid with a soft, lime-sand masonry mortar, brown-beige in color and with well-dispersed lime inclusions.

The poor quality of the bricks, the large number of bat bricks, and the rough manner in which they were laid with mortar joints of varying thickness, support the assertion that the brick exterior walls were not meant to remain permanently exposed. Recent investigation of the exterior features and identification of the chronology of finishes revealed that the North Dependency was constructed prior to the South Dependency and that the



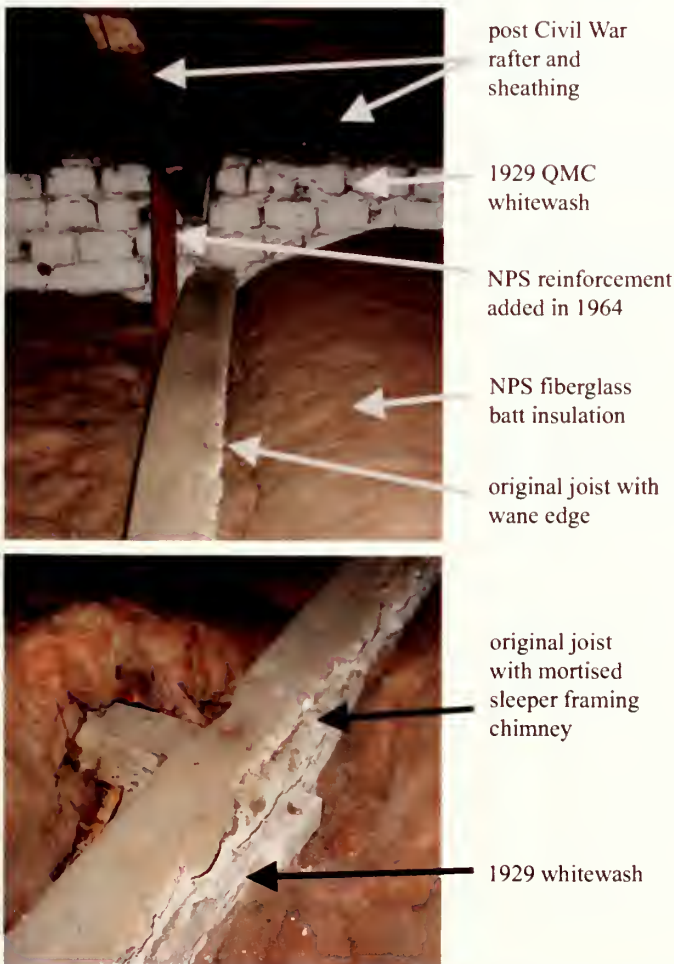
Figure 4. North elevation, 2003, showing painted brick beneath later smooth stucco finish in the recessed arch.

rough cast stucco still covering the majority of the North Dependency exterior is an original finish. It appears that the majority of the south, north, and east elevations were originally rendered with this rough cast stucco, featuring a coarse stone aggregate and white paint. The west elevation and the niches on the north and east elevations were not originally finished with stucco. Instead the brick-work was left exposed and painted the same color as the rough cast areas (Figure 4). At a later date, possibly when the South Dependency was constructed (and certainly by the period of significance), the west elevation and recessed areas of the north and east elevations had a smooth, natural cement stucco surface with what is often called a “cork float” finish. Though patched over the years, significant areas of the original smooth stucco survive today. See *Appendix E: Field Notes, Section 1* for drawings identifying the location of original stucco finishes.

As with its present appearance, the south elevation originally had three exterior doors facing the courtyard, with door thresholds extending at varying heights above grade. From the yard, the building appeared to be a single-story structure. Molded wood cornices were located above the doors, and painted panels with wood frames were positioned further up the wall in line with doors and cornices.

The panels featured paintings reportedly done by George Washington Parke Custis.

The North Dependency’s north elevation differs considerably from the south elevation on the South Dependency. The former suggested a two-level interior with a pair of window openings on both floors of the end rooms. The upper-level had five openings set in the brick wall above the foundation and corresponding to the room divisions present in the interior (two in the east, one in the center and two in the west rooms). The openings probably accommodated six-light sash hinged at the top. Directly below these, in the east and west rooms, were another set of openings (measuring approximately 3'-6" by 4'-6") set into the stone foundation wall. Little evidence of the historic lower window configuration survive. The presence of a six-over-three window with a fixed upper sash appears most likely based on available information including the surviving lintel, height of the window off the room floor, and the view of the opening in the “Uncle Joe” photograph (Figure 11). Also see *Appendix F: Supplemental Drawings* and *Ap-*



Figures 5 (top) and 6. Above east room, 2003. A surviving original joist with a wane edge, roughly finished and unpainted (until the 1929 QMC restoration). Original joists passed through or sat atop the north and south exterior walls to function as outriggers beneath the eaves.



*pendix I: Period and Rehabilitation Drawings* for drawings of the proposed historic lower windows.

Although the roof has been changed, analysis of the surviving outriggers suggests that those corresponding with the historic joists beneath the roof (primarily above the west room, with one each above the center and east rooms), along with the four diagonal outriggers (one at each corner) likely date to the building's construction and that the remaining outriggers may also be original. Paint studies of the applied moldings on two of the outriggers indicate that these moldings are not original, though they replaced moldings that were approximately the same size. The north and south elevation soffits and the frieze boards beneath the architrave on the west elevation and the vents, balusters, and frieze boards on the east and west elevations are likely original or date prior to 1860. See *Appendix E: Field Notes, Section 2: Finishes Survey* for identification of original woodwork and a discussion of early paint finishes.<sup>3</sup>

The roof was originally covered with wood shingles presumably on wood lath nailed to the rafters.<sup>4</sup> This traditional system allowed for air circulation on the underside of the wood roof. Because the roof and areas of the upper edge of the north and south walls were rebuilt, there is little definitive physical information about the historic roof structure. Surviving elements in the roof systems of both dependencies provide some indication of the original construction. Four primary joists survive above the west room, with one each above the center and east rooms (Figures 5 and 6). Headers and sleepers boxing around the original chimney location above the east and west rooms also date to the building's construction. Judging by the surviving materials, the North Dependency roof originally had joists measuring between 3" to 4" wide by 4-1/2" to 6-1/2" high, placed between 3'-10" and 4'-1" on center, and extending beyond the north and south walls to function as outriggers beneath the eaves. Joists were vertically sawn on the sides and hewn on the top; several had wane edges.

No historic rafters survive above the North Dependency. However, using two likely original rafters found above the South Dependency's west room as a guide, the original North Dependency structure may have featured rafters with a mixture of vertically sawn and hewn sides measuring approximately 3-1/2" to 4" by 3-3/4" to 5-1/4". The rafters were probably spaced at approximately 2' intervals (closer than the joists in order to support the roof lath) with every second pair of rafters in line with the joists.

Based on the 1864 photograph (Figures 8 and 9), gutters were not an original feature of the North Dependency roof.

## **Interior**

The manner in which the North Dependency interiors were divided is highly unusual and quite distinctive for a dependency from this period. Until the current investigation, the specific nature of how the end sections of the quarters were configured and connected was not fully understood. In some instances, sources confused rather than clarified just how the dependency was constructed. The earliest surviving recollection of the North Dependency is by Elizabeth Randolph Calvert, cousin of Mrs. Lee. In 1875, Calvert wrote that thirty years earlier, in 1845, the slave quarters were "two long buildings consisting of three rooms each on one floor, the one of the east contains a kitchen and furnished homes for some of the house servants."<sup>5</sup> Yet, physical investigation revealed that the building was originally constructed with a more complicated interior configuration. The 1929 QMC restoration, while correctly interpreting much of the historic structure, was inaccurate in several crucial areas.





Figure 7. Center room, south corner of west wall, 2003, shows the infilled original door set between a wood lintel above and the masonry shoulder below. This door led to the upper floor of the west room. NPS plaster and concrete block from 1964 conceal much of the historic opening. The partition dividing the forward vestibule and the rear living space ran perpendicular to this wall joining it near the center of the image (to the right of the door).

The recent physical investigation, combined with a thorough study of the archival record and photographic evidence from the 1860s, has provided conclusive evidence that the east and west room interiors were originally divided into two full-height stories. The upper floor of each room was entered through an interior doorway on either side of a vestibule in the center room. The lower-level end rooms were reached through the south elevation entrances and stairways descending to the below-grade floor level.

Located roughly at the current grade, the center room was divided into this forward vestibule containing the entrances to the upper-level east and west rooms, and a rear living space (Figure 7). Due to the tight location and lack of evidence of permanent stairs on the walls, it is likely that the upper-level doorways in the center room were reached by way of wood ships ladders. The crawl space below the center room was unoccupied.

Both the upper and lower-level rooms on the west side of the building, the upper-level east room, and the rear room in the center of the building were living spaces for Arlington slaves. The lower-level of the east room was a summer kitchen. Because the North Dependency's original interior configuration (and function) appears to have remained largely unchanged until the Civil War era, a more detailed discussion of these spaces, as well as the evidence of their

historic appearance, is presented in the following section (1850-1865) focusing on the period of significance.

The current brick floor pattern dates to the QMC restoration.<sup>6</sup> When the QMC undertook their 1929 restoration, historians reported finding remnants of the original brick floors in the east and west lower-level rooms. They also reported locating the stone fireplace hearths. Recent archeological explorations of these rooms, however, were inconclusive in identifying the original floor material and position. Existing physical evidence shows that originally the west room had a brick chimney centered on the west wall and the east room had a corresponding chimney centered along the east wall. The rooms were plastered some time after construction.

### 1850-1865

Documentary evidence about the North Dependency's early interior configuration dates primarily to the period immediately before and during the Civil War. In the early 1850s, George Washington Park Custis was, according to Mary Custis Lee, "seized with a spirit of improvement."<sup>7</sup> Numerous repairs were made to the Mansion. It is unknown whether any work was done on either of the dependencies. Around this same time, Benson J. Lossing visited Arlington and made his sketch of the North Dependency. The drawing showed the south and east elevations much as they would appear in the Brady photos taken a decade later. In April 1855, the Lees decided to make major improvements to

Arlington House. Two months later, Agnes Lee's journal mentions that Robert E. Lee returned to Arlington for a week long visit before assuming his new post in Missouri. Thus "he was able to see the renovations then underway."<sup>8</sup>

When Lee returned in 1858, to settle the will of his recently deceased father-in-law, he found that, "Everything is in ruins and will have to be rebuilt." Other letters noted that the Mansion and stables leaked, the mill required \$800 in repairs, and that the overseer's house was so deteriorated "it deters respectable men with families from engaging."<sup>9</sup> During Lee's first year of stewardship, he improved the estate to a degree that compelled him to raise the valuations he placed on the Mansion and dependent buildings in tax from \$8,000.00 to \$9,100.00.<sup>10</sup> Work had included repairs to the overseer's house and the mill, covering the Mansion and stable, and laying the foundation for the barn. Again, no evidence exists to indicate whether the dependencies were included in this activity.<sup>11</sup>

Lee identified the North Dependency as a "one story brick kitchen" in his 1859 fire insurance application.<sup>12</sup> Many years later, the historians assumed that Lee was referring to the interiors as single-story spaces. Based on conclusive physical evidence, supported by the Uncle Joe photograph, and the recollections of Jim Parks and the Gray sisters, it is evident that Lee actually was describing only the exterior appearance of the building from the yard elevation. This is in keeping with the custom at the time of identifying the stories of a building by the front elevation rather than its interior configuration or rear elevation.<sup>13</sup>

After the bombardment of Fort Sumpter, in April 1861, Robert E. Lee resigned his commission in the U.S. Army. In May, Mary Lee and her children departed Arlington leaving most of the slaves behind, including the Gray family, Jim Parks, Daniel Dotson, Ephraim Derricks, and others.<sup>14</sup> The army quickly established control of the estate and began to convert it to a military facility.<sup>15</sup> In 1864, the national cemetery was established at Arlington. It is unknown what work, if any, was undertaken on the dependencies during the war.

### ***Oral History Relating to the North Dependency Exterior 1850-60s***

In 1929, as part of their restoration research, the QMC interviewed a number of former slaves at Arlington, asking about the historic appearance and function of the dependencies. These interviews provided conflicting information about how the north elevation looked during the mid-nineteenth century. QMC restoration team member Charles Mortimer had a conversation with former Arlington slave Jim Parks (whose father was the cook at Arlington). Parks recalled that there were exterior doors on the north side of the building that led from lower-levels in the east and west rooms out toward the kitchen garden. Mortimer wrote, "I asked him many questions regarding the so-called 'summer kitchen' building. He described it quite minutely and although some of the entrances which he said were there, had been filled in, and the stone or brick work stuccoed over, I tore off some of the stucco to verify the location of the doors he said were there and found the wooden lintels for two of them. These are the two western entrances on the north side."<sup>16</sup> Quartermaster architect L.M. Leisenring added a note stating, "There has been quite a little change in the grade in the front and rear of this building since the time the kitchen was located in the east end, but Uncle Jim said that he recollected very distinctly how they would bring the food up from the basement kitchen and, "passing right by the well," carry it into the house.

The QMC restoration team also interviewed the former slaves and daughters of Selina Gray, Mrs.



Emma Syphax and Mrs. Sarah Wilson. In reference to the north elevation, however, they stated that “there was no entrances on the other side of the building.”<sup>17</sup> Considerable weight must be given to the Gray daughters’ recollections. Their family had lived in the South Dependency and their daily lives were led around the immediate vicinity of the North Dependency. Both daughters were in their teens during the Civil War. According to the QMC documents relating to the interview, “The field servants rarely came around the house and the Gray children were the only negro children allowed around the house.”

Although Jim Parks was one such field slave, he stated that his father was the cook that lived in the North Dependency’s upper-level above the summer kitchen. The Gray daughters recalled that “Uncle Ephraim, the gardener, and Uncle George, the cook” lived in that space. The “Uncle George” mentioned by the Gray daughters was probably the same George Parks listed in the slave census prepared in 1858 following G.W.P. Custis’ death.

It is likely that the wood lintels uncovered by Mortimer during his impromptu physical investigation related to the original lower-level window openings rather than door openings. These lintels were uncovered in the east room interior during the recent physical investigation and are discussed below. Architectural examination of the east room interior and archeological investigation along the north exterior wall uncovered no evidence that a door opening ever existed along the north wall.

#### ***Oral History Relating to the North Dependency Interior 1850-60s***

The oral histories of Jim Parks and the Gray daughters collected by the QMC agree that a “summer kitchen” was located on a lower-level, below grade in the east room of the North Dependency. Parks recalled “that the kitchen was down ‘below’ and that in the attic above the kitchen, the cook (his father) and the assistant cook slept. This was at the east end of the building.” Leisenring stated that he “ . . . questioned him very closely regarding the attic feature and the down-below features, due to the fact in the attic would give those occupying such space, headroom. Since the flooring which has been in the building in recent years has been torn out, I can easily see that there was headroom for sleeping apartments above the rooms down below.”<sup>18</sup>

The Gray daughters stated, “The steps to the kitchen come in from the outside, cat-a-corner, at the entrance nearest the house and the other house servants lived in this building.” Their description is open to some interpretation. The QMC restoration team concluded that there were exterior stairs that descended below grade in front of the south elevation. This treatment, which is not supported by the Civil War era photos, is further discussed in the section below (1928-1933).

During their interview, the Gray sisters recalled that “all cooking, winter and summer, was done there [in the summer kitchen] and their small brother was being trained by Mrs. Lee as a house servant to bring the dishes over to the house.” They stated that the washing was done in the cellar of the main building, under the north wing. They also stated that where there is now a drinking fountain in the yard, near the kitchen, there was a pump and it had a cover over it, but not the cover that is there now. They said they did not remember just what the other top was like. They said there was a large spit in the kitchen and an old-fashioned oven. They both distinctly remembered seeing the old cook beating Maryland Beaten Biscuits on the biscuit block and that “at the center of the kitchen floor was a big table and also one was at the side and one against the wall.”



The former slaves had differing memories of how the center room was used. Mortimer reported Jim Parks remembering that “In the center of the building the washwoman did her work. She in turn slept in the attic.” It is unclear whether Parks, in speaking of an “attic” was referring to the upper-level above the west room (which seems to correspond to the layout in the east room of the North Dependency), or whether he was stating that there was an upper sleeping level in the center room. It would have been unusual for laundry to be done in the one area of the structure that conclusively did not have a fireplace. The Gray daughters recalled that Aunt Judy, the nurse “who was much respected by all,” lived in the center room downstairs. What the sisters meant by “downstairs” is not entirely clear, though they were likely referring to the main level (or in the case of the center room, the level at grade).

The historic configuration within the area immediately inside the doorway functioned as a vestibule with ladders ascending to door openings on the east and west walls. A plank wall separated this forward area from a rear living space occupied by Aunt Judy. The space below the center room was always windowless and with such a short ceiling height and no ventilation probably remained unused.

The only information provided by Jim Parks about the west rooms was that the coachman and second coachman lived there. Referring to the west room, the Gray sisters recalled that the coachman Daniel Dodson lived in the basement of the kitchen building where he often cooked for himself. Also referring to the west rooms, they said that the housekeeper Aunt Eleanor Harris slept upstairs, at the far end of the building.



Figure 8. South elevation, 1864 photo by Andrew Russell showing center and east doors of the North Dependency. This image confirms that the door openings were near grade during the Civil War period. Other features seen on this elevation (the rough cast stucco, panel doors, exposed stone foundation, painted panels, and cornices above the door) correspond to the building's current appearance.



Figure 9. South elevation. Close-up of Andrew Russell photograph, 1864. A light-colored horse or sheep is visible on the painted panel above the east room door. Note that gutters and downspouts were not present on the building at this time. Also note the missing skirt board in the lower portion of the east elevation arch.

### *Photographic Documentation from the 1850-60s*

Captain Andrew Russell, a colleague of the well-known Civil War photographer Matthew Brady, took a series of photographs at Arlington on June 28-29, 1864. One image showed much of the south and east elevations (Figure 8). While it can not be assumed that the south exterior elevation had remained untouched between the original construction and the time Russell took the photographs, the current physical investigation has confirmed that many of the features, materials, and characteristics seen in the photographs were original to the building's construction.

The photographs reveal important information about the condition and appearance of the North Dependency. The building appeared in sound, though not well-maintained condition (Figure 9). Masonry foundation stones were in prominent relief; rising moisture in the wall was quite evident; and the mortar joints were in need of repointing. The exterior walls appear to be covered in a rough cast stucco finish. There is, what appears to be, a projecting cornice above each of the doors on the south elevation. The photograph shows that the North Dependency, divided into three sections was entered through panel doors set just above grade. With the exception

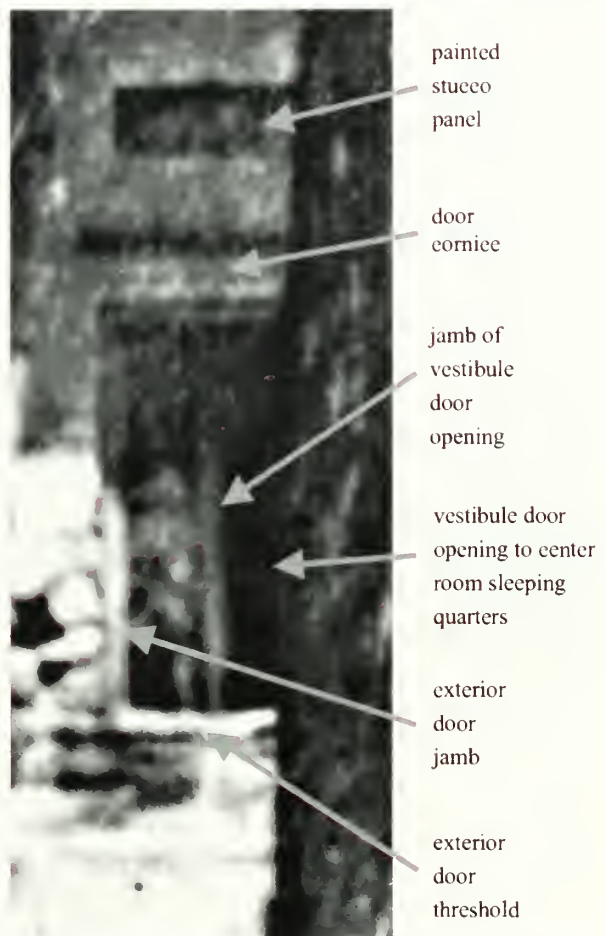


Figure 10. South elevation, center door. This further enlargement of the 1864 Andrew Russell photo shows the west side of the inner vestibule wall visible through the center room exterior doorway.



of a skirtboard missing from the 1864 east elevation, all other horizontal wood moldings shown in the historic photos correspond to locations of those that currently exist. It appears that some of the woodwork was not painted white as they currently appear. Close examination of the photograph in Figure 9 reveals a shingle comb at the roof peak. The comb (an extension of the shingle above the ridgeline) is on the northern slope and measures from 4" to 6". The chimney can also be seen under magnification. It rises approximately 18" off the peak and has a stucco finish on the exterior shaft. The chimney has a large cap of cut stone or fired-clay blocks that also has a stucco finish. See *Appendix F: Supplemental Drawings* for details of the historic roof comb and chimney.

Because the exterior door to the center room was open at the time the photograph was taken, the image provides additional information about the interior of that space (Figure 10). A recessed horizontal line is visible along the left (west) side of the opening. This line appears to be a doorway jamb on the inner vestibule wall—a feature for which there is physical evidence discussed below. Unfortunately, because of the small size of the feature in the image and the poor quality of the print, it is not possible to determine with certainty the partition's construction.

The other known photographic documentation that contributes to the understanding of how the building looked in this era is an 1864 photograph of an African-American identified as "Uncle Joe" (Figure 11).<sup>19</sup> This photograph, acquired by the National Park Service in 1962, is a significant piece of evidence unavailable to the 1929 historians and restoration planners. It shows Uncle Joe sitting in a doorway. Until the current investigation, it was not clear which doorway (or, for certain, which building) was shown in the photograph. By comparing distinctive stones beneath the door in the Uncle Joe photograph and those in the Brady photographs, numerous matches were identified, proving conclusively that the opening is the east door of the North Dependency.<sup>20</sup>

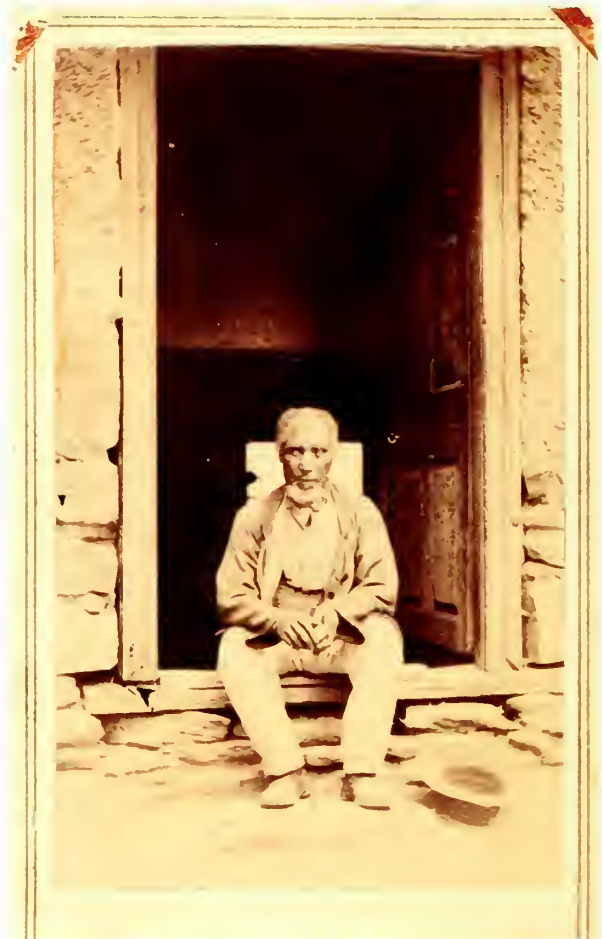


Figure 11. Doorway to east room, photograph of "Uncle Joe", circa 1864. The image shows the east summer kitchen window on the north wall directly behind Uncle Joe. (A muntin is visible just over his right shoulder.) The bulkhead that framed the entrance landing and boxed out the upper-level is also visible directly above and behind him. From Uncle Joe's position on the sill, it is clear that the landing within the doorway was lower than the height of the sill. This photograph also shows the 1860s era door and frame characteristics, and confirms the presence of the rough east stucco and exposed foundation exterior.

The photograph confirms the generally poor condition of the building at the time of the Civil War. Mortar around the stones framing the east doorway was deteriorated and there are sizable gaps between the wood door frame and the masonry finishes. As with the Russell photograph, the door threshold along the south elevation was located a noticeable distance above the then current grade level. While the sepia-tinted photograph is difficult to interpret,



it appears that the door and trim were either painted a dark finish or that the paint was heavily weathered (a similar conclusion can be drawn from the Russell photograph).

This single photograph reveals crucial information about the North Dependency's historic appearance. The wood panel door is hinged on the east door jamb. The details of the door, jamb, and sill visible in the photograph suggest that the door is older than the building to which it is attached. The door has six raised panels projecting beyond the stiles and panels—a characteristic more common to eighteenth century doors and more high-style than typically used on a dependency or slave quarters. The manner in which the sill was attached to the jambs and the mitred corner of the backband piece on the lower right jamb further indicate that these elements are not in their original locations. It is likely that the pieces were removed from another, older structure, saved for reuse, and installed on the dependency when it was constructed. It is possible that the reused materials came from the first version of the Mansion's north wing built in 1802 as a two-story structure and extensively remodeled when the south wing was constructed a short time later. For drawings of the historic North Dependency door configuration, see *Appendix F: Supplemental Drawings*.

Within the open doorway, over Uncle Joe's shoulders, there is a light, rectangular area corresponding to the location of the easternmost lower window opening and confirming both the presence of this opening and the interior's split-level arrangement during the period of significance. The dimensions of the opening and the horizontal muntin visible in the photograph provide important evidence about the make up of this since-infilled lower-level opening. These windows are further described in the section below (discussing physical evidence), as well as in *Appendix F: Supplemental Drawings*.

Along a line above Uncle Joe's head is a flat feature, which closer inspection and digital manipulation of the image reveals to be a bulkhead around the door opening, separating the entrance to the lower-level summer kitchen from the upper-level living space. The flush face of the bulkhead, in a plane parallel to the south wall, was made of vertical planks, which at the top were probably tied to the roof joists and at the bottom were connected to the joists supporting the upper-level floor and lower-level ceiling (on the east and west sides) and a sleeper joist (on the north side). A sleeper joist, running east-west, would have been concealed behind the horizontal board with a bead on the lower edge visible above Uncle Joe's head. A narrow line of ceiling plaster that has broken from its key is visible hanging below the beaded board and the flat plane of the summer kitchen ceiling receding to the back (north) wall. This visual evidence, along with historic material identified on the walls (and discussed below) confirms that during the period of significance, the summer kitchen had a finished plaster ceiling rather than exposed beams.

Evaluation of this photograph along with other information known about the east room provides the following description of this area of the building in the 1850-60s. The bulkhead construction was a necessary feature as the upper-level floor assembly would otherwise have cut across the south door opening. A landing existed inside the door and below the door threshold. The landing served as a platform that led to stairs descending to the kitchen. (Upper-level entry was through the center room vestibule.) Continuing this interpretation, a stairway descending to the kitchen floor was located along the south wall. The door visible in the Uncle Joe image swings on the east side, putting the kitchen stairway along the west half of the south wall. Such a landing and stair configuration would be in accordance with the Gray daughter's recollection that "the steps to the kitchen come in from the outside, eat-a-corner, at the entrance nearest the house . . ." The interior layout permitted the

North Dependency's south, courtyard facing, elevation to read as a single story while accommodating a two-story interior. It is quite distinctive, unusual, and historically significant. Such an arrangement allowed for the kitchen to be locked and secured when not in use and separated from all slave quarters. (Note the large lock in Figure 11.) For drawings of the proposed historic stair configuration see *Appendix F: Supplemental Drawings* and *Appendix I: Period and Rehabilitation Drawings*.

### ***Physical Evidence Relating to the Appearance of the North Dependency - 1850-60s***

In 2003, the team preparing the current Historic Structure Report undertook a limited physical investigation of the North Dependency. Analysis included a sampling of the building's historic paint stratigraphy, examination and identification of various mortar samples, and the removal of 1964 NPS plaster from portions of the center and east room walls to study historic materials and features beneath. A separate team undertook limited archeology work in the three interior spaces and along the north exterior wall in that areas that were chosen to augment findings or address questions raised by the HSR team. The architectural investigation set out to determine the appearance and function of the North Dependency during the period of significance. The work was complicated by surviving material from (and the remaining physical impact of) both the QMC 1929 restoration and the NPS

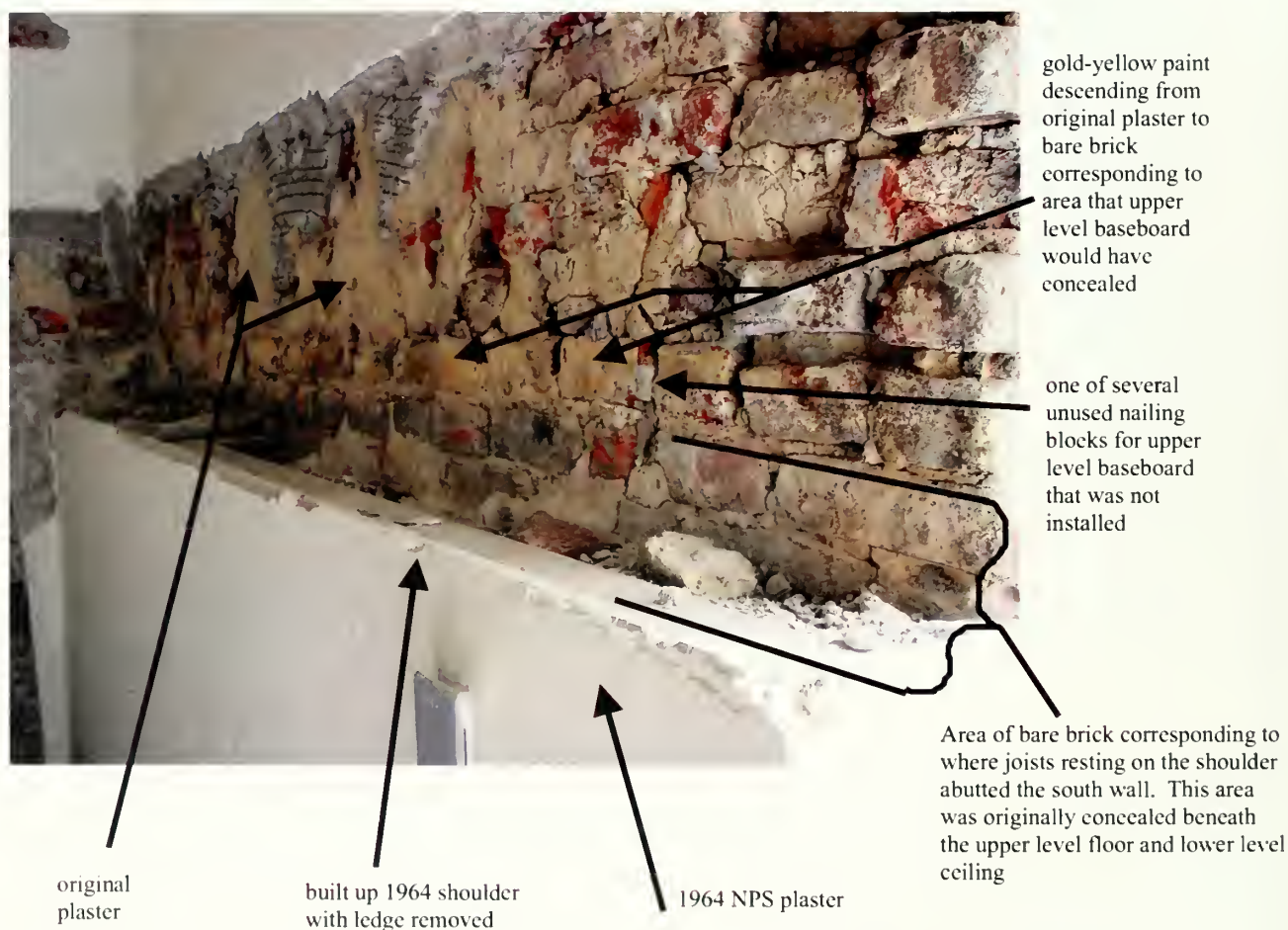


Figure 12. East room, south wall, 2003. Showing area where the upper-level floor joists rested on the shoulder and against the east side of the south wall. Originally this area was concealed behind the upper-level floor and the lower-level ceiling. A gold-yellow distemper paint is found on the original plaster above continuing down to where the plaster thins to bare brick. This area where the plaster stops was originally to have been covered with a baseboard. But unused nailing blocks suggest that the baseboard was never installed and the lower edge of the upper-level wall was simply painted over.



alterations in the 1960s. The area of the building interior comprising the west room above the current floor level was inaccessible because of the ongoing use for Park functions. Results of the investigation confirm much of the other evidence gathered for the project: photographic, documentary, and oral, as well as reveal significant new information about the North Dependency's history.

### Exterior

Examination of the exterior was limited to a visual investigation, selective sampling of the stucco finish and mortar, and paint analysis of the stucco and wood moldings. Investigating the exterior architectural details and the chronology of finishes confirmed that much of the rough cast and stucco renderings, as well as much of the woodwork and moldings currently in place on the building, survive from the period of significance. See *Appendix E: Field Notes, Sections 1 and 2* for drawings identifying current exterior features and finishes that date to the period of significance. Most of the elements that were replaced after the Civil War era, such as the frieze boards and bargeboards on the gable ends, closely match the historic versions. Visual investigation confirmed that the doors, door frames, and roof system (except for the surviving historic joists) are of a more recent age than the period of significance—facts confirmed by the photographic and documentary record.

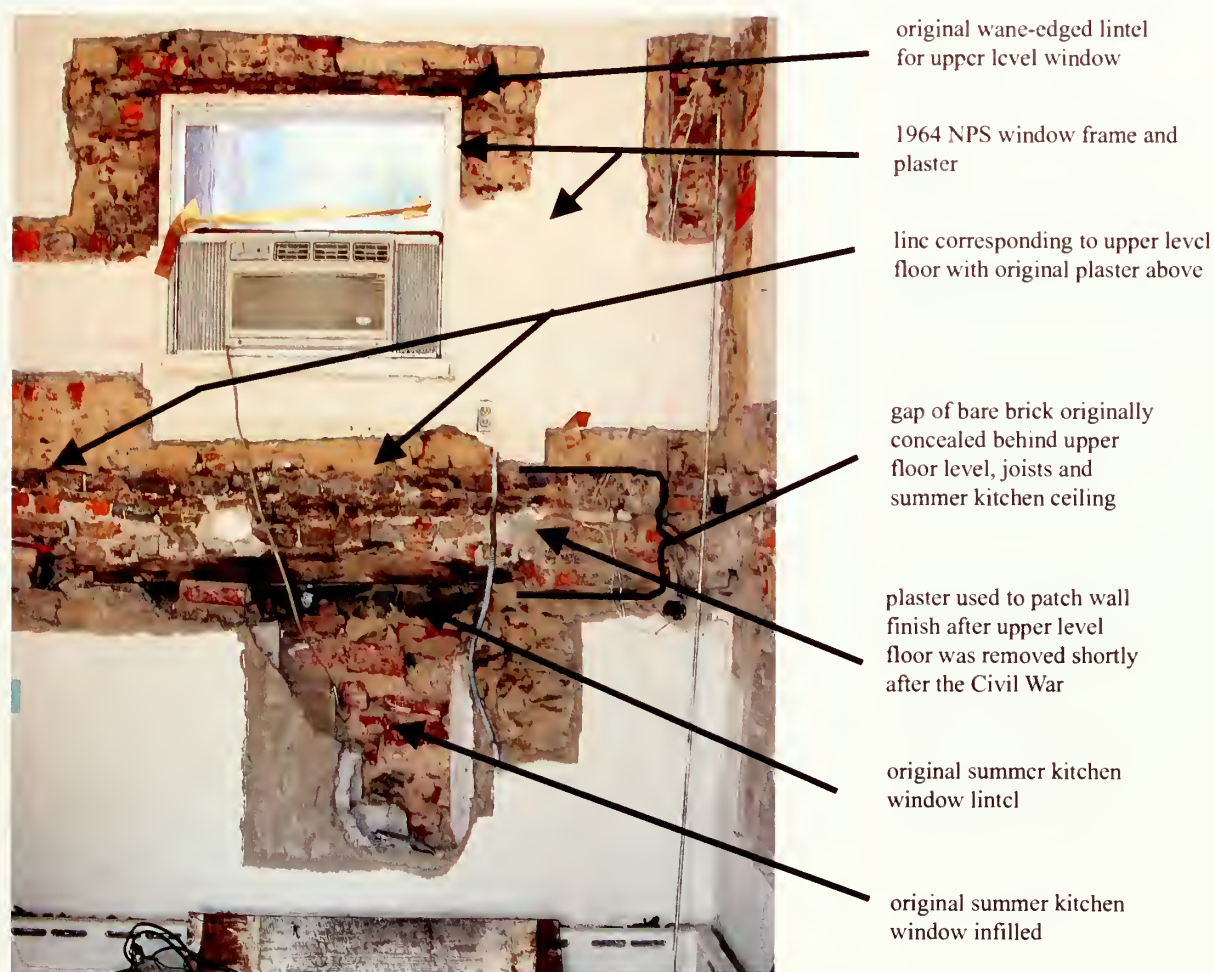


Figure 13. East room, east half of north wall, 2003. Showing evidence of original upper-level floor location and summer kitchen window. Also visible are alterations made when the upper-level floor was removed by the QMC after the Civil War, work done by the QMC in 1929, and changes made in 1964 when the NPS infilled the lower window and converted the room back to a single story space.



### *East Room Interior*

In the building interior, investigative efforts focused on determining the 1850-1860 use and appearance of the east and center rooms. All documentary evidence suggests that the basic configuration (though not the function) of the east room was mirrored in the west interior space. The North Dependency interiors had been significantly disturbed over the last two hundred years—most notably by the conversion to a single floor level sometime after the Civil War and the two twentieth-century restorations. Both the NPS and the QMC removed historic material during their research and restorations with little (surviving) documentation about what was there before work began and what was found during the course of their investigations. Surprisingly, a considerable amount of historic material was still extant beneath the most recent layers of 1960s era gypsum plaster.

### *East Room Floor Levels*

Evidence regarding the position and dimensions of the kitchen ceiling/upper-level floor was discovered in several locations in the east room. On three of the four interior walls there is a discernible band of bare brick; it is the area of the wall that was concealed behind the original upper-level floor, joist and summer kitchen ceiling assembly. A line of surviving plaster above (with patches of a bright yellow, white, and rose colored distemper paint) corresponds with the upper-level living space; below, plaster (found primarily on the west wall) corresponds with the summer kitchen. The masonry shoulder running along the north and south wall supported upper-level floor joists.

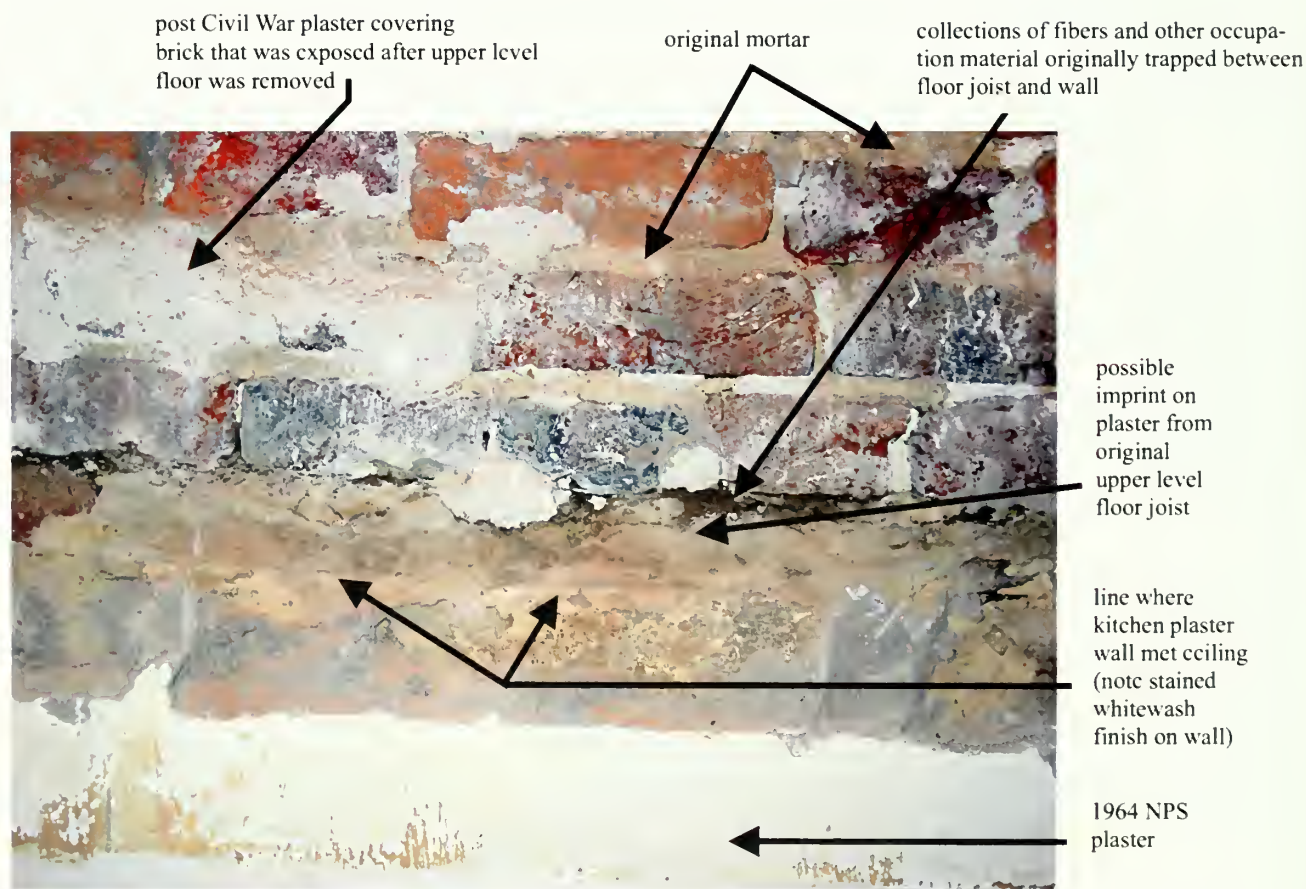


Figure 14. East room, west wall, 2003. Showing evidence of original floor level between upper living space and lower-level summer kitchen.

Surviving original plaster that corresponds to the upper-level living space was most prominent along the east side of the south wall (Figure 12). This plaster layer thins down to bare brick along a line that was intended to be concealed behind a baseboard. However, baseboard was never installed as indicated by the five unused nailing blocks and layers of distemper wash that cover areas of the plaster, continue over the bare brick, and end at a line where the upper-level floor was located. Sections where early plaster survives on this wall show that the original finish was a rough covering that merely smoothed the significant variations in brick and mortar joint surfaces. Though the original intention may have been to have a finished space complete with baseboards and chair rails (discussed below), evidence suggests that the room's actual appearance was much more basic with a painted coarse plaster wall surface and few if any moldings.

Evidence of the upper-level floor level continue along the east wall. Surviving historic plaster from both the upper and lower-level rooms is more prominent on the north half of the wall (as the south half was disturbed by a post-Civil War window opening and construction of the 1929 QMC reconstruction fireplace). Along the northern portion of the wall, there is a clear band of bare brick approximately 15" wide, a portion of the wall that was once concealed by the upper-level floor, floor joist, and summer kitchen ceiling assembly. Several wood nailing blocks were found above where the original upper-level floor was located. These features, original to the building, may have been placed to support a chair rail molding. The absence of nail holes, however, suggests that the blocks were never used.

Considerable information about the east room's historic configuration as two distinct spaces was revealed beneath the 1964 plaster along the north wall (Figure 13). Here the lower edge of the upper living space is even more clearly defined than on the south wall. Original plaster ends at a relatively smooth line that corresponded with what was probably the upper edge of a baseboard. The position of this line corresponds with the position of the unused baseboard nailing blocks on the south wall. Again, the gap of bare brick below corresponds to an area originally hidden beneath the upper-level floor, joists and summer kitchen ceiling. (This area was patched with plaster shortly after the Civil War when the upper-level was removed from this space.) Further up, original nailing blocks are set within the brick wall further indicating plans for a chair rail molding. As with those found on the east wall, the absence of nail holes indicates that moldings were likely never installed.

Also on the north wall, the position of the wood lintels from the summer kitchen north windows are clearly discernible. Their position has not changed since the building was constructed. The lower edge of these beams corresponds to the original shoulder height (and the original height of the summer kitchen ceiling). The lower edge of the lintels and the shoulder height also match up with a distinct line found on surviving plaster on the west wall. The line is found along the west wall, remnants of original plaster on what was the summer kitchen's upper wall surface survived beneath the 1964 NPS plaster (Figure 14). Below the line, the original plaster has approximately 8-10 whitewash layers with accumulated soot, flyspots, grease, and other staining consistent with a kitchen space. The upper edge of the whitewash marks where the kitchen ceiling once met the wall surface. While the edges of the upper room plaster and paint on the north, east, and south walls shed light on the location of the upper-level floor surface, the paint and plaster edge on the west wall provide a definite position of the summer kitchen ceiling. It also shows that the summer kitchen ceiling was flush with the shoulder line—an indication of how that ceiling/floor assembly was constructed.



Gathering the results of the physical investigation and combining them with what can be learned from historic photographs provides the following description of the historic upper-level floor/lower-level ceiling assembly's position and character.

According to the plaster remnants on the west wall, the summer kitchen ceiling was positioned approximately 9'-3 7/8" above the historic floor level. As the lower edge of the plaster line on the north wall and the paint/nailers on the south wall are at the same level, it would initially appear that they mark the upper-level floor line. However, placing the floor at a level that lines up with the plaster line on the north wall cuts across the baseboard nailing blocks on the south wall. Neither baseboard nailers nor the paint and plaster found on the south wall would be found below the floor line (hidden beneath the floor and abutting the floor joists). Instead, these elements would have been above the floor line. If 5", the height of a typical early nineteenth century baseboard is subtracted from the line corresponding to the nailing blocks and north wall plaster line, the upper-level floor height would be approximately 10'-7/8" above the historic floor. Therefore, the space between the established lower-level ceiling and the upper-level floor is approximately 9". This height could have accommodated joists with lath and plaster below and floor boards above. See *Appendix I: Period and Rehabilitation Drawings* for further description of the historic configuration.

The joists running north and south rested on the north and south wall shoulders. (Note that the shoulders would have been approximately 1" above the plaster line on the west wall to account for the lath and plaster.) No information about the number or characteristics of the beams has survived. However, their placement had to accommodate a number of other features in the space. They had to box around the entrance bulkhead (discussed below) and at least one joist had to intersect the window opening on the north elevation. A likely configuration along that north elevation was the presence of two outer plates resting on the wall shoulder, one bridging each window opening. Any joist that intersected the window opening would be saddle-jointed or mortised into the plate.

The other floor level present during the period of significance was in the summer kitchen. Evidence revealed during the physical and archeological investigation indicates that the historic summer kitchen floor was located close to where the floor level exists today. The current brick floor, dating to the 1929 QMC restoration is approximately 5' below the south exterior door sill. Surviving historic plaster along the lower west wall has a line where the whitewash finish ends just below the current brick floor, indicating that the current floor is in close proximity to the former position of the historic floor. Archeological work beneath the brick floor proved inconclusive in locating definitive strata of earlier floor levels.

#### *East Room Bulkhead*

A vertical 1" thick line of darkly soiled masonry was identified on the south interior wall just east of the doorway. The line corresponds to where the east side of the bulkhead's plank wall abutted the masonry wall. Presumably the plank bulkhead partition was installed before the wall plaster and finishes, leaving the line behind the bulkhead edge exposed and susceptible to airborne soiling.

This evidence, combined with information about the historic upper-level floor and doorway from the center room obtained from the recent physical investigation, Civil War era photographs, and 1929 oral histories reveals a fascinating picture of how the North Dependency's eastern section looked during the period of significance. First, because the upper-level floor cut across the exterior opening



on the south elevation, a bulkhead was necessary to separate the upper-level living space from the lower-level and to provide space to enter down into the summer kitchen. A sleeper joist must have carried the upper-level floor structure around the exterior door opening to form the bulkhead. Because no pockets or other means of connecting the bulkhead to the south interior wall were located during the recent physical investigation, it is likely that the structure was tied to (and supported by) the upper-level floor joists at the bottom and the roof joists at the top.

A landing existed inside the door and below the door threshold (note in the Uncle Joe photograph that his seat extends below the threshold). The landing served as a platform that led to stairs descending to the kitchen. (Entrance to the upper-level being through the center room.) A stairway was located along the west half of the south wall descending to the kitchen floor. The 1864 photograph of Uncle Joe shows a door swinging to the east, placing the stairway on the west side of the door. (A stair descending from the platform directly down was a consideration but was ruled out because it would terminate directly in the center of the primary work area in front of the kitchen hearth.) This below grade circulation pattern would be in accordance with the Gray daughters' recollection that, "The steps to the kitchen come in from the outside, cat-a-corner, at the entrance nearest the house ..." This interior layout is quite distinctive, unusual, and historically significant. For drawings of the proposed historic bulkhead/landing configuration see *Appendix I: Period and Rehabilitation Draw-*

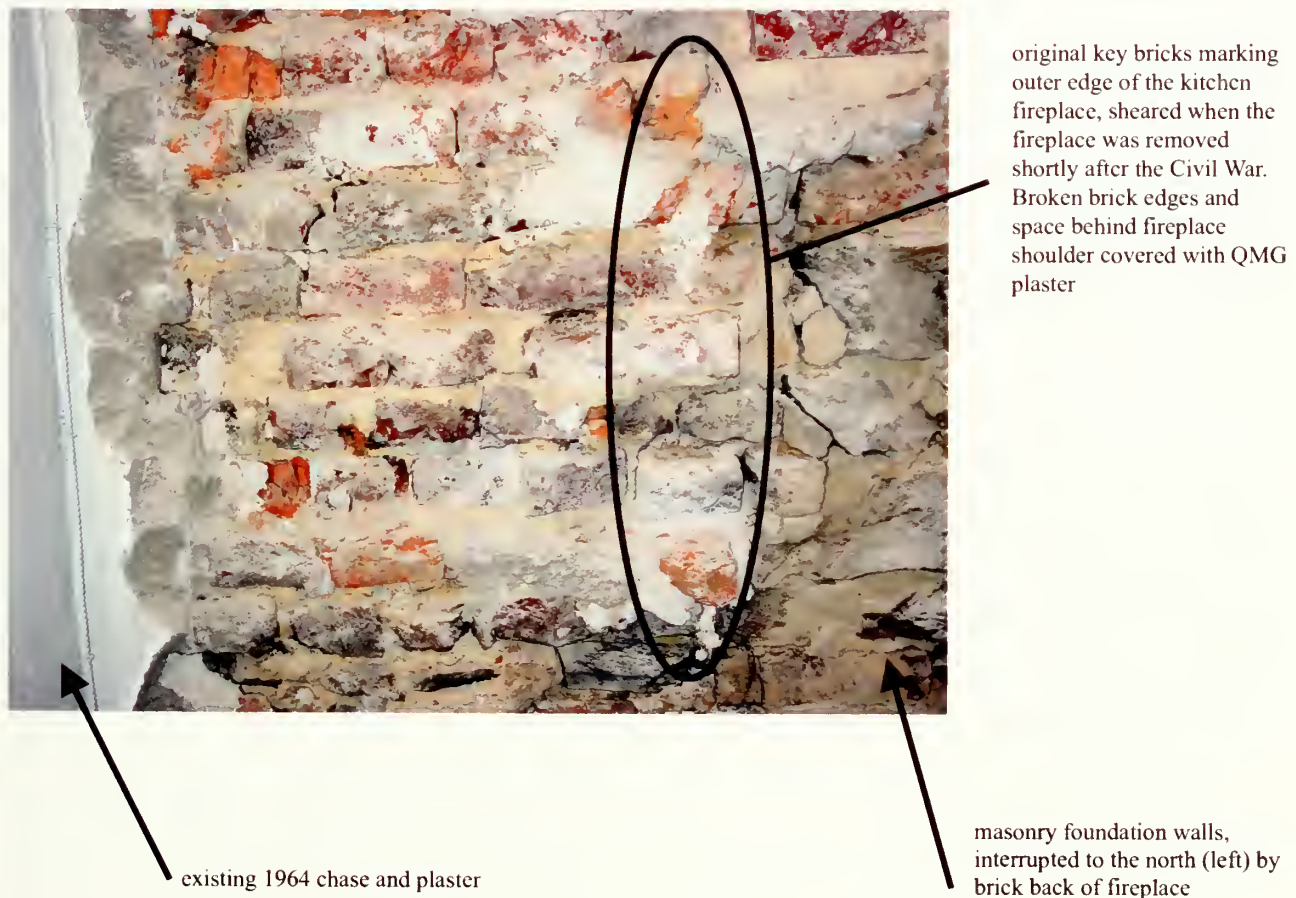


Figure 15. East room, south half of east wall, 2003. Showing the area behind the south half of original fireplace. Key bricks that once provided the connection between the wall and the fireplace were sheared to make the wall flush, when the fireplace and upper-level were removed. Plaster over top the broken bricks is the same as the post-Civil War era QMC plaster along the original upper-level floor line (see Figures 13 and 14).

ings.

#### *East Room Window and Door Openings*

During the 1850-1860 period, the upper-level of the east room had two windows on the north wall. They were situated in the same location as the two openings that currently exist. A lintel above the east window is original to the structure; the lintel above the west window, along with sills and the frames of both windows are mid-nineteenth and twentieth century replacements. Although no pictorial documentation of the historic windows survives, it is likely that the openings were filled with a six-light top sash that was hinged at the top and swung inside. See *Appendix F: Supplemental Drawings* and *Appendix I: Period and Rehabilitation Drawings* for further details about the proposed historic upper window.

Entrance to the summer kitchen was gained from the exterior east door, along the south elevation. The photograph of Uncle Joe, taken in front of the door from the outside, reveals much about the historic door and frame. Physical investigation confirmed the width of the original door opening and located an original nailing block for the door frame or interior molding.

Although Jim Parks asserted that in the nineteenth century there was a rear door to the summer kitchen on the north elevation, there is no corroborating evidence of such a disturbance to the interior wall. Archeological investigation of the exterior (going down to the wall footing) also failed to identify any infill or other alteration that would suggest a former door opening.

A doorway on the south side of the west wall provided a means of entrance in the upper east room, connecting to the center room vestibule. Reopened by the QMC in 1929 and later infilled with concrete block by NPS in 1964, the masonry edges of the opening appeared to be clean with original mortar extending to the edge (rather than a sawtooth or broken brick pattern that would have resulted from inserting the opening after the original construction was complete). This helps establish that the opening was original to the structure. Though the lintel above the opening also dates to the original construction, it appears to have been reused from another structure.

#### *East Room Fireplace*

The original east room kitchen fireplace and chimney were demolished shortly after the Civil War when the QMC converted the room to a single story space. The area was further disturbed when the QMC reconstructed a chimney and fireplace for their 1929 restoration. The latest significant alteration occurred in 1964, when the National Park Service removed the 1929 restoration fireplace (above the current grade), installed a simple stove chimney, and plastered over the rest of the wall. Yet evidence of the chimney's original dimensions survived the various alterations and was discovered beneath 1964 plaster during the recent physical investigation.

Investigation revealed rows of spaced key bricks still embedded in the wall approximately 6'-6" apart (Figure 15). These bricks tied the original fireplace to the east wall and provided the outer dimensions (width) of the historic fireplace. Along the north side of the 1964 chase, just above the current grade, remnants of the original plaster flue lining with accumulations of soot are clearly visible (Figure 16). Other isolated patches of original plaster with soot are also visible further up on the wall corresponding to what was the original flue. A pattern to the plaster that might suggest the presence of a fireplace on the upper-level in addition to the lower-level summer kitchen fireplace was



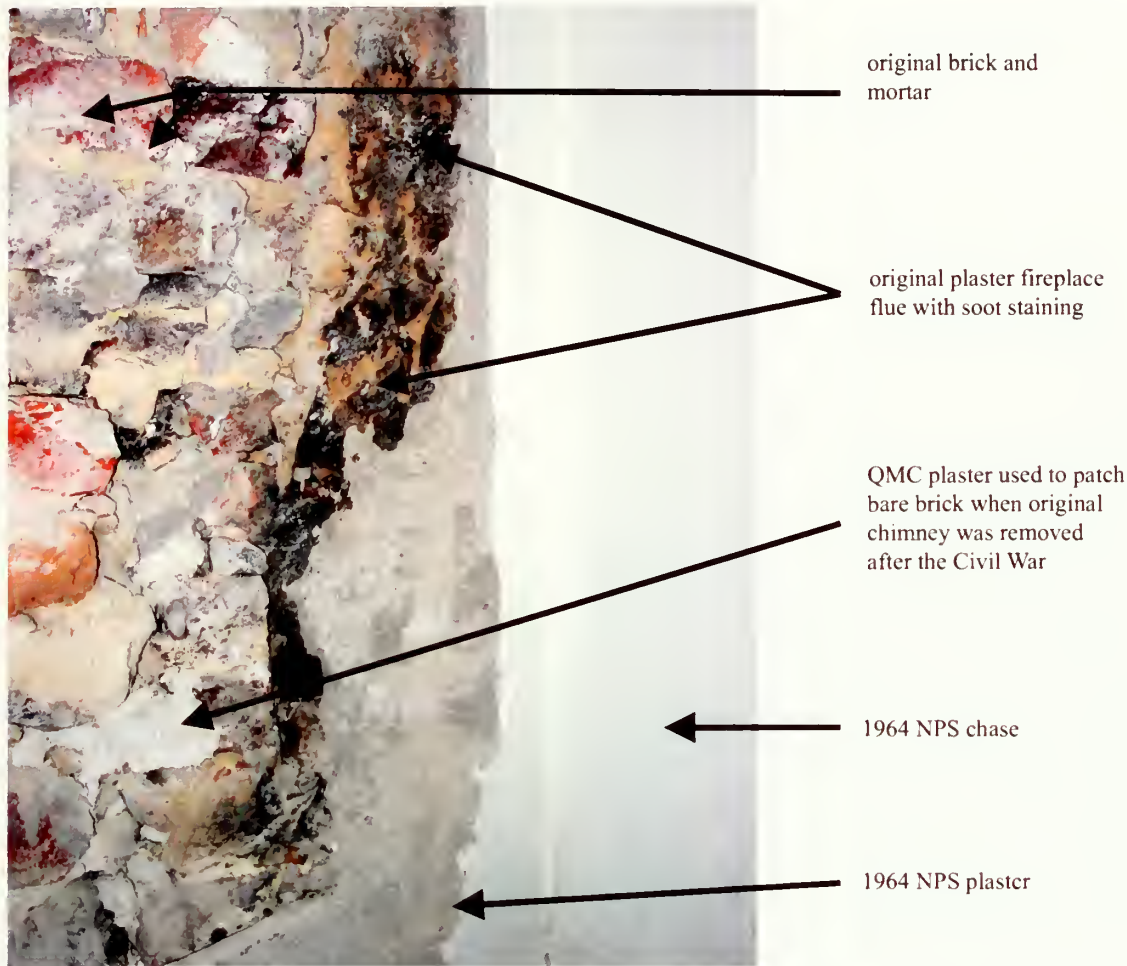


Figure 16. East room, north area of east wall, 2003. Showing area to the north of the 1964 NPS chase. The soot-stained flue of the original fireplace is visible beneath the NPS plaster.

not discernible.

Vertical lines of sheared key bricks and historic plaster reveal that the width of the historic chimney was consistent from its base in the summer kitchen to where it narrowed to pass through the roof joists. Because the lower portion of the QMC fireplace remained in place along the lower section (beneath the 1964 floor), the east wall below current grade was largely inaccessible for investigation. The likelihood of uncovering additional evidence remains slim, however, if the rest of the 1929 brick fireplace is removed during a future restoration, the east wall should be fully investigated to identify original features. Even with portions of the 1929 fireplace still extant, some evidence survives in the area. Below the current grade a broken key brick corresponding to the north edge of the original fireplace is just visible behind the 1929 construction (Figure 17). For information about the proposed historic fireplace, see *Appendix F: Supplemental Drawings* and *Appendix I: Period and Rehabilitation Drawings*.

#### *East Room Wall Finish*

As a result of the three previous major alteration campaigns—shortly after the Civil War, during the 1929 QMC restoration, and during the 1964 NPS restoration—surviving historic interior plaster is sparse but that which remains is invaluable in understanding the 1860s appearance of the rooms. The most recent investigation, though only uncovering portions of the wall surface, revealed fragments of



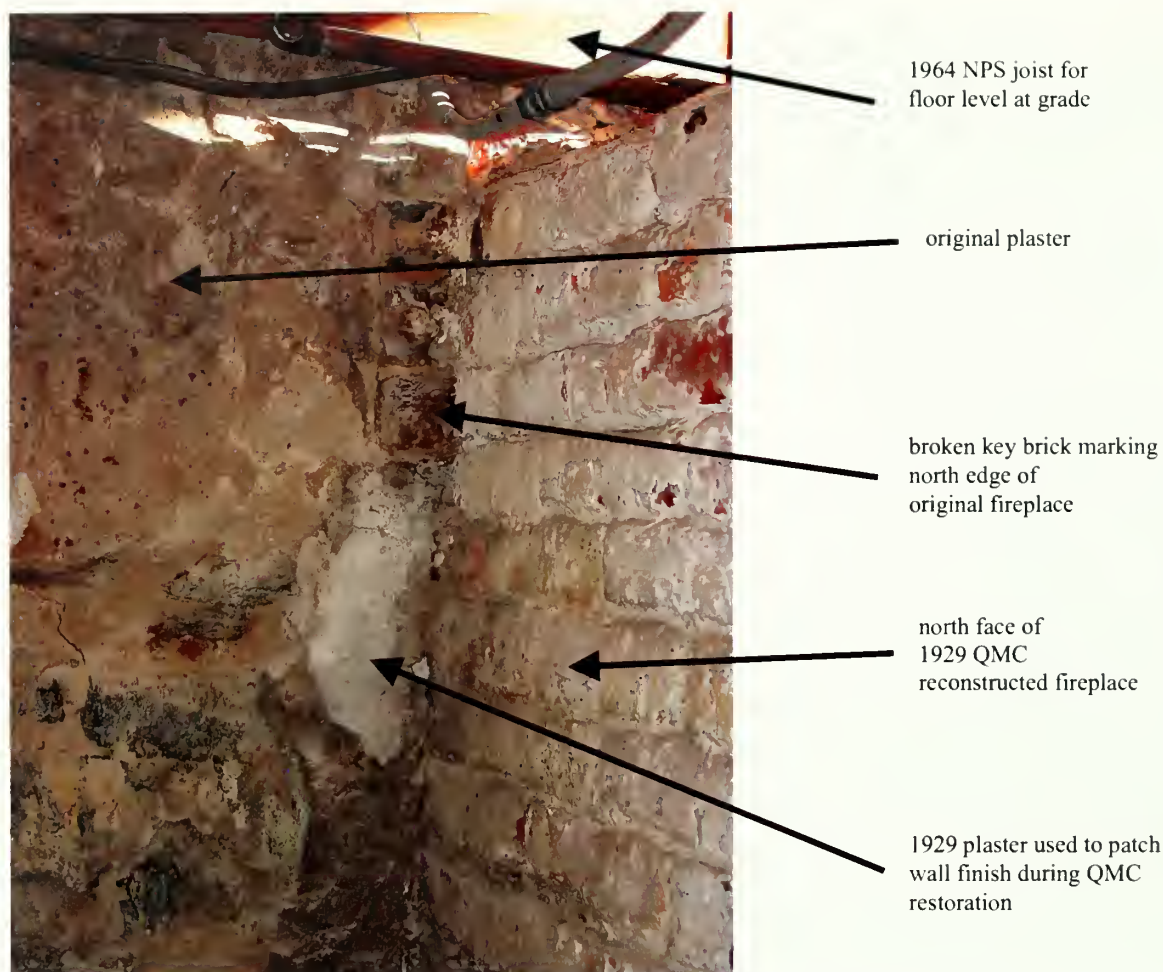


Figure 17. East room, north portion of east wall, 2003. Showing area of wall beneath current grade with evidence of original kitchen fireplace edge, original plaster and alterations made in 1929 when the QMC restored the summer kitchen and reconstructed a fireplace.

historic plaster on all four walls. The most intact areas were found on the center of the west wall and on the east half of the south wall (both of which are described in more detail in the previous section discussing the position of historic floor levels). The west wall sample corresponds to the summer kitchen and indicates that this room had a single layer of lime-based plaster that was regularly coated with whitewash. The earliest surviving plaster on the south wall corresponds to the upper-level living quarters, suggesting that this space had multiple layers of distemper wash (the most prominent surviving color circa 1860 being a gold-yellow, the most recent being a rose color), and at least two separate plaster applications prior to the post Civil War-era. See *Appendix E: Field Notes, Section 3, Finishes Survey* for more details on the historic paint and plaster layers identified during the recent physical investigation.

#### *Center Room Interior*

Discoveries made during the recent physical investigation provide a more complete understanding of the center room's configuration and appearance during 1850-60. The 1964 NPS plaster layer was removed from limited areas above the masonry shoulder on the east and west walls, revealing a large amount of intact historic plaster.

#### *Center Room Door Openings*

The door openings on the east and west walls near the exterior entrance are original to the building (Figure 18). These doorways provided access to the upper-levels of the east and west rooms. It is likely that the openings were reached from the center room doorway via wood ships ladders, as there was limited space (and a lack of physical evidence) for a stairway. Historic mortar and brick extending to smooth, undisturbed door edges indicates that the openings were created as part of the building's construction. The east door lintel which is bedded in original mortar further confirms this. Though the oak lintel has been part of the wall structure since the original construction, ghosts of whitewash finish on the concealed top surface suggest that it was reused from an earlier structure.

### *Vestibule*

Physical investigation also confirmed that the center room interior was originally divided into a forward vestibule and a rear living space. Ghost imprints in the original plaster show where the finish was applied up against the original vestibule partition approximately 5'-5" into the room from the south wall (Figure 19). The imprint left on the plaster and the lack of any visible points of connection suggest that a simple wood partition existed, probably of vertically-oriented wood planks approximately 1" thick and tied to the floor and ceiling joists rather than the walls. See *Appendix F*:

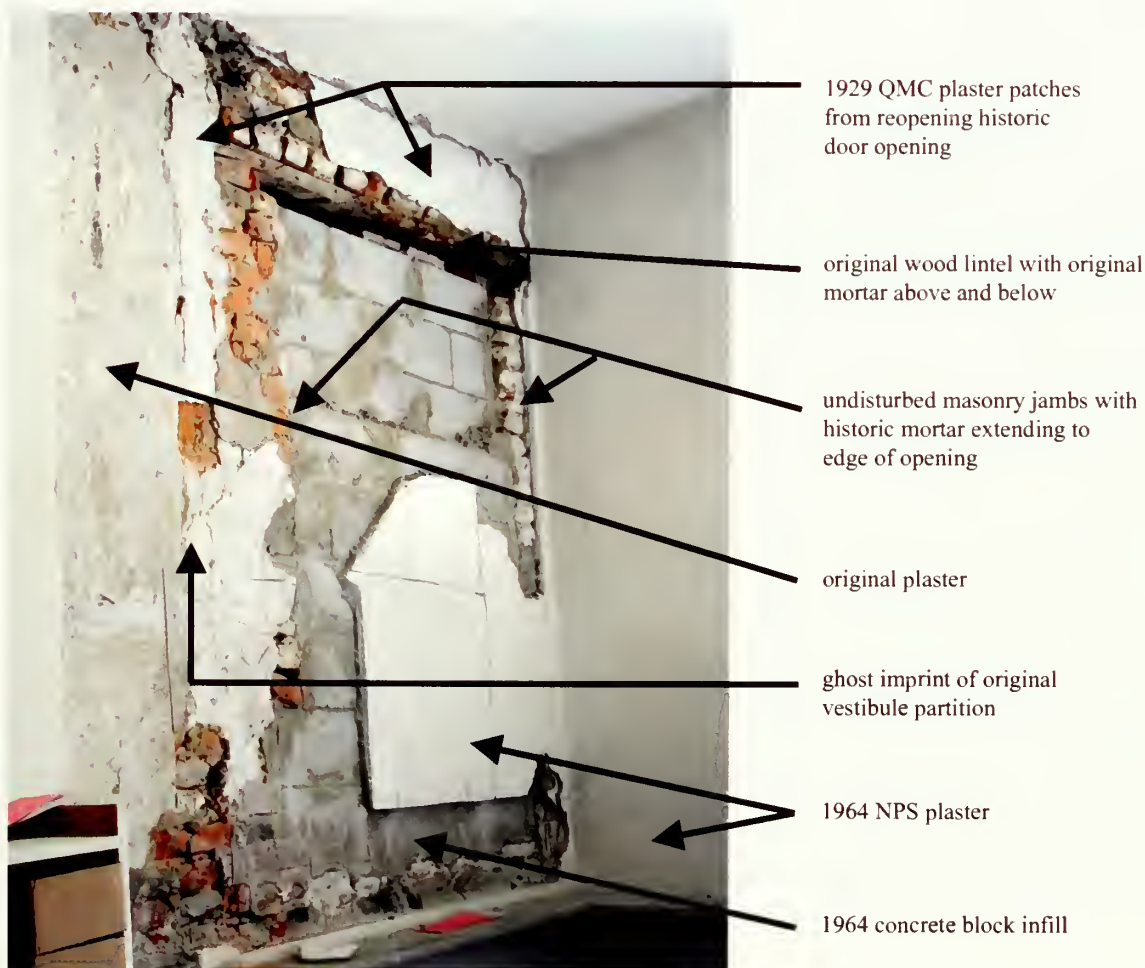


Figure 18. Center room, south corner of east wall, 2003. Showing the original doorway to the east room upper-level. This opening and the corresponding opening on the west wall were filled in by the QMC after the Civil War, when the adjacent rooms were converted to a single story space. The QMC reestablished the openings in 1929 as part of their restoration. The National Park Service closed them up again in 1964 when they reverted to single story spaces in the end rooms.



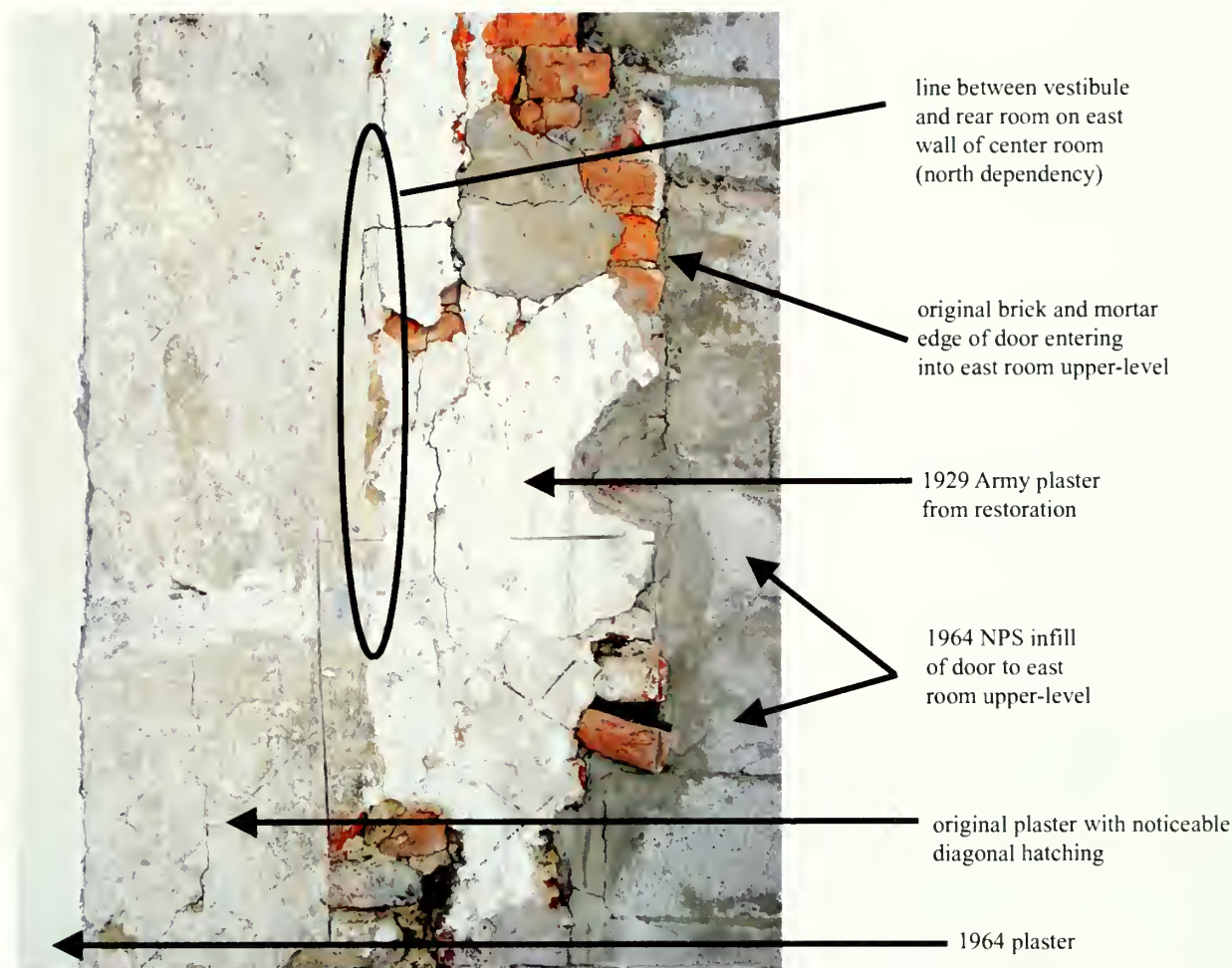


Figure 19. Center room, close up of east wall, 2003. Showing line where original plaster abutted vestibule partition. In 1929, when the QMC reopened the doorway (seen at right) to the east room upper-level, they patched the brick work with a Portland cement-based plaster to the right of the line.

*Supplemental Drawings* for a sketch of the proposed historic plank partition.

When the QMC restored the center room in 1929, they built a stone and brick wall below grade to support their vestibule floor and partition. In 1964, the NPS removed this wall when they dismantled the QMC restoration and converted the main level to an unpartitioned storage room. Today, areas of disturbed masonry on both the center room's east and west foundation walls reveal where the QMC vestibule wall was located. QMC drawings from 1929 state that their east-west below grade vestibule wall was built upon an existing masonry wall. However, the north edge of this wall, located approximately 4'-2" in from the south wall does not reach the position of the historic plank partition above (at 5'-5"). The recent archeological investigation turned up no evidence of a east-west masonry partition wall below the current dirt floor. This information suggests that the historic plank partition and any masonry wall below were not aligned with each other.

#### *Center Room Floor Level*

Photographic evidence indicates that the center room was entered through a doorway with a threshold slightly above the then exterior grade. It was hoped that physical investigation would reveal historic joist pockets that would confirm the height of the original floor. The only pockets revealed



during selective removal of the 1964 plaster finish, however, were those inserted by the QMC during their 1929 restoration. These pockets, roughly cut into the existing masonry wall, corresponded to the QMC interpretation of the interior as a two level space with the entrance vestibule near grade and the rear living space rising up approximately 2' higher at the partition door. There is no physical or documentary evidence to support the QMC interpretation. It appears that the QMC floor was placed at that position based on the assumption that the space below was somehow utilized in the mid-nineteenth century. Throughout the history of the North Dependency, the center room has had a dirt surface below grade. The 2003 archeological investigation turned up very few artifacts, suggesting that this windowless "crawl space" was never occupied, and if used at all, was probably limited to storage. (For further details, see *Archeological Investigations at Arlington House* (44AR17), *The Robert E. Lee Memorial Repair and Rehabilitation of the Mansion and Slave Quarters George Washington Memorial Parkway, December 2003*, not included in this report.)

While original joist pockets were not uncovered during the recent physical investigation, other features were identified that confirm the original presence and location of a historic floor level near the current grade. A series of nailing blocks located approximately 9" above the current grade were found along at least three of the four walls (Figure 20). One block was found on the east side of the south wall, three were found on the west side of the south wall, two were found along the west wall, and seven were located on the north wall (the lower portion of the east wall was not investigated so there may be additional blocks beneath the 1964 plaster there). Some blocks, particularly those on the north and south walls, exhibit nail holes that confirm their use, probably to secure baseboard moldings to the masonry lower wall. Small samples of historic distemper wash survive on the up-

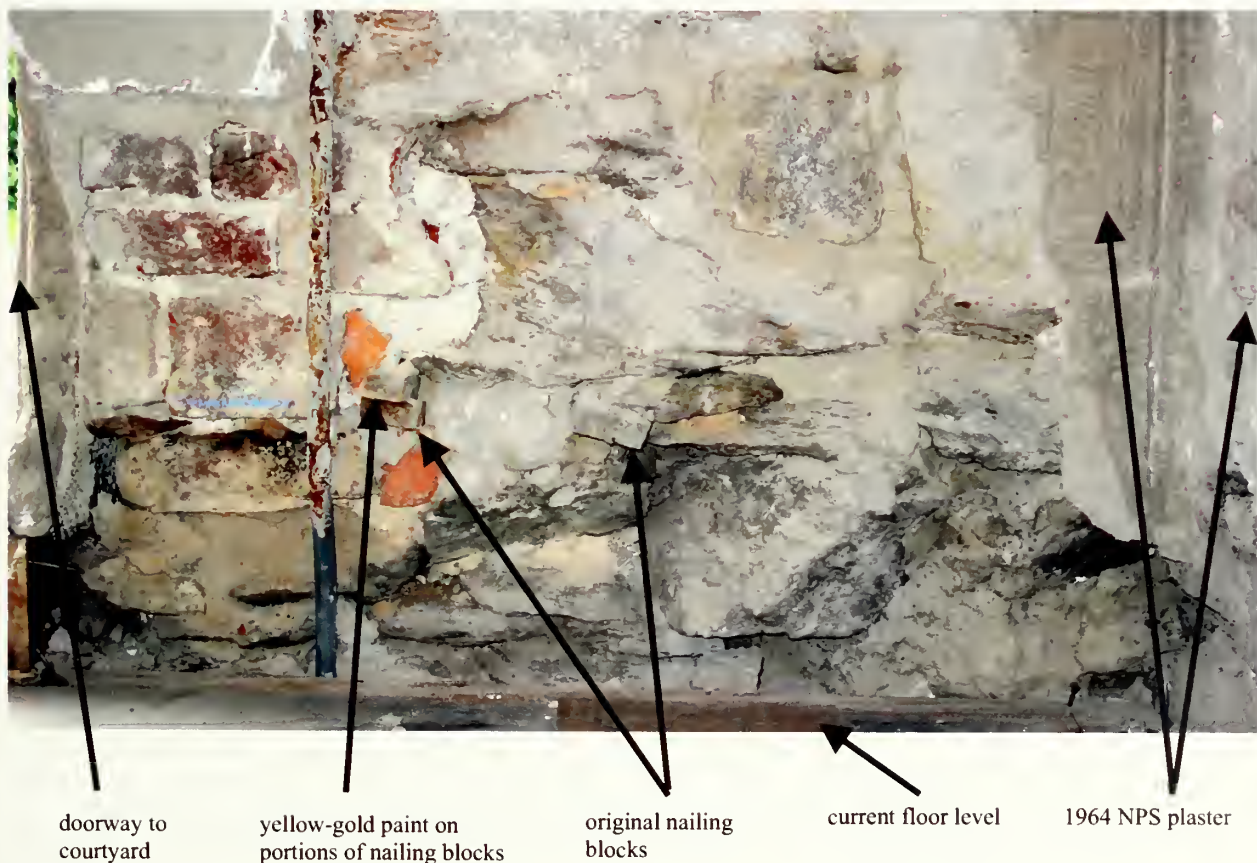


Figure 20. Center room, close up of west side of south wall, 2003. Showing nailers embedded in original plaster.



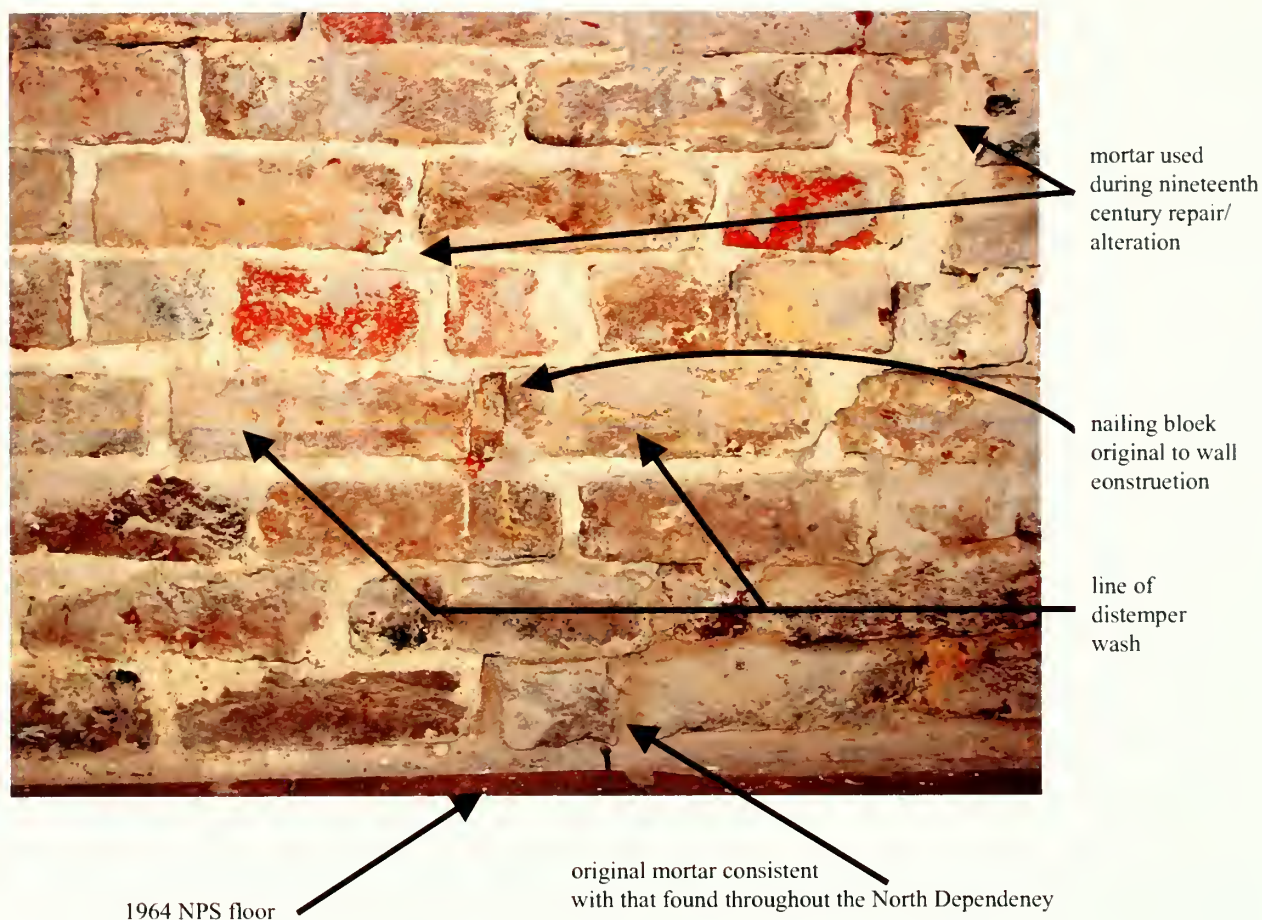


Figure 21. Center room, close up of north wall, 2003, Showing nailers and line of bright yellow distemper wash. It appears that the nailers provided a means of anchoring a baseboard to the wall above the floor. The distemper probably marks a line corresponding to the upper edge of the baseboard. Brick above the line would have been covered with plaster; brick below the line would have been concealed beneath the baseboard. Evidence of distemper on brick is similar to that found on the south wall of the east room, North Dependency (see Figure 12).

per edge of a few of the blocks. The wash is similar to the gold-yellow distemper found on the upper walls of the east room. A line of distemper wash with this same color was also uncovered running along the brick on the lower part of the north wall (Figure 21). It appears that the distemper line indicates where the top edge of the original baseboard was located. Wash on the upper edges of the nailing blocks suggests that these edges were not fully concealed behind the baseboard but protruded slightly above. No bright yellow-gold distemper was found on the surviving plaster finish on the upper walls. If the height of the baseboard (estimated at 5") likely in place in the 1850s is subtracted from a line connecting the nailing blocks and paint remnants, the position of the historic floor can be set at approximately 4" above the current floor level. See *Appendix I: Period and Rehabilitation Drawings* for information relating to the proposed historic floor position.

Because no historic pockets were found that would have held the original floor joists at this level, the original floor was likely supported on a number of posts set into or onto the dirt floor below. The recent archeological investigation found a post hole in the northeast corner of their excavation unit (near the south end of the space) during their limited exploration of the center room floor.

#### *Center Room Walls and Wall Finishes*

The south, east, and west walls within the room have a stone masonry base rising to form ledges, or shoulders, along the west and east walls. Historically the stone walls had a thin lime wash finish directly on the stone and mortar. The brick upper walls are similar to those found throughout the structure. Areas of the north wall feature reused bricks. Some have layers of lime wash not consistent from brick to brick; others have soot stains suggesting that they were originally used in a hearth or chimney construction. The investigation team identified mortar on the north interior wall in an area corresponding with the recessed arch on the exterior that is different from the original mortar found throughout the rest of the building. As the exterior wall has original mortar and finish, it appears that the inner face of this wall may have been rebuilt or repaired following original construction.

Much of the historic plaster on the brick survives on the east and west walls of the center room. Though only a portion of the 1964 NPS plaster was removed during the recent physical investigation, almost all the area uncovered (with the exception of the infilled upper-level doors, north wall, and stone walls) had original finish. It consisted of a single, relatively thin, lime-based plaster layer with multiple coats of a white, lime wash. Along the south corner of the east wall, immediately to the north of the infilled upper-level door, the original plaster layer was applied and then keyed with criss-crossing grooves to better hold an upper coat. Yet washes applied directly to the keyed surface suggest that a finish coat was never applied and that the keyed scratch coat remained exposed (Figure 21). It is a telling indication of how roughly finished the interior was—a feature that should be preserved.

#### *Center Room Window*

Paint layers, construction features, surrounding mortar, and nails indicate that the six-light awning sash and frame on the north wall date approximately between 1850 and 1870. See *Appendix F: Supplemental Drawings* for information about this window unit and its function as the basis for reconstructed windows.

#### *West Room Interior*

Because a bookstore with its slat wall display panels and tile floors currently occupies the entire west room, no physical investigation of the main room was undertaken. Oral histories identify the room's inhabitants as living on two levels during the period of significance. Civil War era photographs show an exterior door at grade. Limited amounts of surviving original plaster exist in the space below grade, and QMC restoration notes mentioning remnants of a historic hearth along the center of the west wall on the lower-level floor. All of these are indications that the historic configuration of the west room was similar to that of the east room. As with the east room, the west room would have featured separate lower and upper floor levels, a bulkhead, landing, and stairway down to the lower-level living space. Investigation of the attic area above the west room revealed a number of original joists, offering the possibility that a more significant amount of finish may have survived on the walls of this room compared to the east room. When the North Dependency is restored and the bookstore relocated, careful investigation may reveal additional information about the space.

#### *West Room Windows*

Both upper window openings in the west room appear to be original. One is occupied by an air conditioning unit, the other with a fixed light, non-operable sash of recent vintage. The nineteenth century lower-level window openings were most recently infilled in 1964 by the NPS.



## 1866 - 1885

During the first phase of the development of Arlington National Cemetery, all staff efforts were directed toward interring soldiers; marking their graves; enclosing the 200 acre grounds; laying out roads, walks, and drainage systems; and planting trees. Some of this work is described in the *Secretary of War's 1865 Annual Report* as well as Arlington Superintendent Thompson R. East's reports for the period of June 1, 1867 to July 31, 1869.<sup>21</sup> There is no mention of any repairs or improvements being made to cemetery buildings, namely Arlington House and its dependencies, either during or immediately after the war.

East's reports and those of superintendents that followed were filed monthly with the Quartermaster General's office. They described the condition and repairs made to the buildings, roads, walls, water supply, and graves at Arlington. Some versions of these reports, many of which survive from the period between 1867 and 1884, had a space for information about the condition of outbuildings—though it was often left blank or filled in with the phrase “same as last report.” The first explicit mention of the dependencies was in April 1869, when Superintendent East reported, “The old kitchen and servants quarters in rear of mansion are in a state of decay.”<sup>22</sup> This situation continued through the summer and fall. In February, the description of the dependencies in the Monthly Report changed from “a state of decay” to “an advanced state of decay.” This characterization was reported through all of 1870. When E.H. Harner took over as superintendent throughout that year, his first monthly report on the condition of the cemetery stated that “The two outhouses near the main building are very old and nearly worthless. I respectfully ask that these buildings may be inspected with a view of ascertaining whether they are worth the cost of repair.”<sup>23</sup>

Harner's concerns were repeated in subsequent reports until August 1871 when he included estimates for repairs of the outbuildings totaling \$1,300.00. Interestingly, he noted that if there is a desire to make the buildings habitable, an additional \$500.00 would be required. The latter approach was approved and repairs began that same month and continued into October. That month's report noted that the outhouses [presumably referring to the dependencies] were plastered, whitewashed, and the woodwork painted.<sup>24</sup>

Because the report indicated that the dependencies needed to be made “habitable,” it is unclear at this point whether anyone was living in the buildings at the time. No definitive date has been established for when the former Lee family slaves moved out of the dependencies. At least some of the former slaves, possibly including the Gray family, were still in residence at Arlington as late as June 1873, when Mary Lee drove by the estate.<sup>25</sup>

At some point between 1864 and 1900, use of the cellar rooms on the east and west sides of the North Dependency was discontinued and the floor level raised to grade. At present, it is unclear precisely when this significant alteration was made. An undated plan (which appears to be from the beginning of the QMC restoration) noted that the narrow stove chimney in the east room that probably accompanied the removal of the upper-level and the discontinued use of the cellar space was “of recent construction.” However, other known alterations to the building (when it was made “habitable” in the 1870s and when a new roof was put on a decade later) are likely occasions for when the interior was converted to a single level.

What is clear is that some time between the Civil War photographs and before 1900, the interior

rooms on each end were converted to single-story spaces, open from the newly installed floor to the rafters. How the new floor was supported is not entirely understood, though it seems likely that the floor was set upon posts. No joist pockets were uncovered in the 1960s, suggesting that the pre-1920s QMC floor at-grade was not anchored into the walls. Later nail holes and wood lath ghost marks found on the underside of an original joist in the east room indicate that a ceiling enclosed this space (as in the South Dependency) during this period.

Other changes were made to the building at the same time. In the east and west rooms, the upper-level and bulkhead configurations visible in the Uncle Joe photograph were removed and the lower-level windows on the north elevation were infilled. Also around this time, the fireplaces were replaced with straight chases approximately 18" square, probably to vent heating and cooking stoves. Though this alteration could have occurred later (as suggested by the QMC drawing, dating to the beginning of the restoration, that noted it was "of recent construction"), it probably was concurrent with the reconfigured interior.

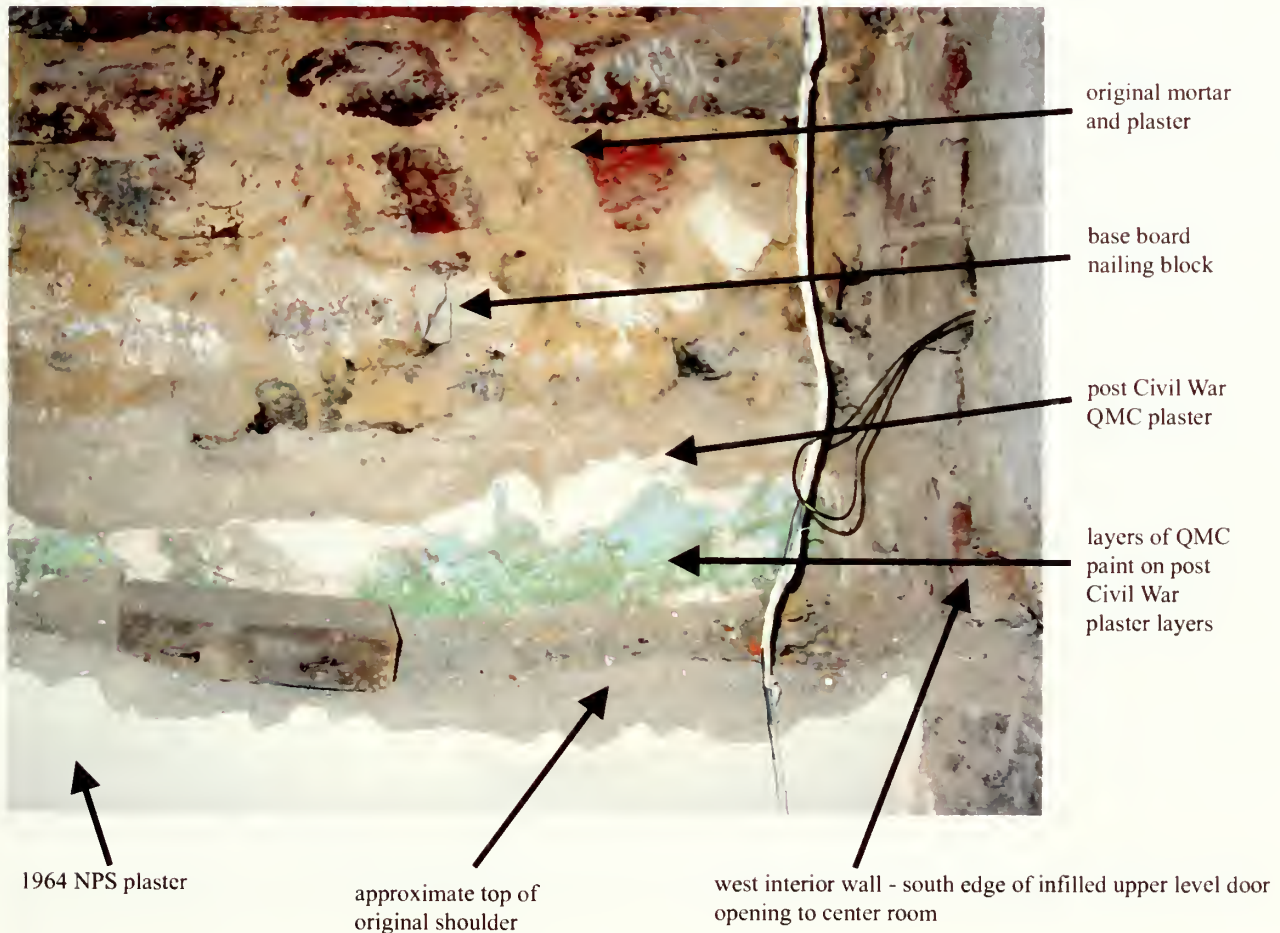


Figure 22. East room, west corner of south wall. After the Civil War, the QMC converted the east and west rooms to single level spaces by removing the upper-level floor and installing a new floor at-grade. This alteration revealed several courses of bare brick that the QMC then plastered over. Remnants of this plaster are visible on all four interior walls. Layers of paint finish survived on the north and south walls behind several courses of brick that the QMC had laid atop the original shoulder to raise the shoulder height during the 1930 restoration. The photo shows the shoulder with these later bricks removed to reveal the post Civil War plaster beneath.



Very little of this material remains because the QMC, during their 1930 restoration, removed earlier interior alterations to the building made after the Civil War. Evidence of the QMC period of occupation is limited to strips of plaster that were concealed behind the QMC restoration built up brick shoulders, patches of plaster that clung to fireplace key bricks sheared in half when the fireplace was removed sometime after the Civil War, and most of the existing roof system (probably installed in the 1880s and retained during the QMC and NPS restorations).

Remnants of the nineteenth century QMC plaster used to patch the walls following removal of the upper-level floor were revealed in the east room during the recent physical investigation (Figure 22). This intermediary plaster is lime-based, large-grained in consistency and contains a significant amount of animal hair. It is concentrated along the north and south walls behind areas of the shoulder that were later built-up with additional brick courses, as well as in more fragmentary pieces along the upper-level floor line. The areas along the east and west walls have several layers of green and eggshell blue paint. The fact that this intermediary plaster appears to postdate the original plaster, but does not sit atop the original plaster (it appears to be applied directly to unfinished brick) indicates that the brick beneath was originally unfinished and corresponds to an area of the wall concealed by the original upper-level floor and lower-level ceiling. When this floor was removed, the bare brick was covered with these later plaster layers. Further evidence of this chronology is indicated by the presence of the same intermediary plaster overtop sheared fireplace and chimney key bricks along the east wall. When the chimney and upper-level floor were removed, the exposed key bricks and rear face of the flue were covered over with this intermediary plaster. Multiple paint layers and different paint colors between layers reinforce the position that the QMC changed the interior to a single level at-grade, most likely between the 1870s and 1880s.

The creation of a new window opening along the south half of the east elevation may have also occurred when the interior of the east room was converted to a single level. It is clear that the window did not exist during the Civil War period. A plan of the North Dependency that appears to date to the beginning of the QMC restoration marked the window and noted that it was 2'-8" wide by 2'-5" high and approximately 6'-2" above the existing floor level (at-grade). As with alterations to the chimneys, the note also stated that the window was "of recent date."

The work undertaken in 1871 to make the space "habitable" is a possible, even likely, occasion when the floor level was moved and the building converted to a single floor structure. No mention of this work, however, has been found within the monthly reports or other written documentation. Such a date would have put the work before the arrival of David H. Rhodes, who recalled that the North Dependency was "a one-story affair" and who stated that with the exception of roof work, no substantive changes were made to the building during his tenure.

April 14, 1873, marked the arrival of Rhodes at Arlington. According to his "historic memories" recorded during the QMC's restoration, Rhodes served as a landscape gardener at Arlington until March 1930. Identifying the North Dependency as the "old kitchen" and "servant's quarters," he recalled that during his first year there and for a number of years after, "the west room was occupied at various times with watchmen or laborers employed in the cemetery while the east room was utilized as a carpenter and repair shop." Rhodes also remarked, "This structure—a one-story affair—consisted of three (3) separate rooms and three (3) separate door entrances and a partially excavated base



ment—the walls and floor being dirt and unfinished.” He did not recall any work being undertaken on the building from the time he started in 1873 to when the roof was replaced several years later.<sup>26</sup>

Monthly reports from 1874 also identify the function of the buildings. In July, the superintendent remarked that the two outbuildings, three rooms each, were used as tool houses, storehouses, and watchman’s quarters.<sup>27</sup> Reports from this period indicate that the buildings were being maintained by the U.S. Army.

The North Dependency remained in good condition for the next several years, until 1878 when the Quartermaster General’s office authorized the Arlington superintendent to repair the roofs of the Mansion and “outhouses.”<sup>28</sup> At that time the shingle roof of the mansion was described as having slate nailed on top of a previous layer of old [wood] shingles. The wood shingles had deteriorated to the point that the nails no longer secured the slate had no hold. A notation in this report states that repairs were undertaken in June 1878, however, it is unknown whether the roofs of the dependencies were included in this repair campaign or whether it was limited to the Mansion. Subsequent descriptions of work undertaken on the dependencies suggests that work on those buildings was deferred until the 1880s.

Monthly reports continued to describe the structures as being in good condition until 1884. At that time, the report stated that the “outhouses [were] in very fair condition, except one building connected with the Mansion, which needs a new roof.”<sup>29</sup> It is not clear to which building this note refers, as there was no known connection between either of the outhouses (dependencies) and the Mansion. It does suggest that the dependency roofs were not significantly repaired at the same time as the Mansion roof in 1878. The September 1884 report noted that the dependency, previously described as being in bad condition, was covered with a new slate roof.<sup>30</sup>

In May 1885, correspondence between QMC staff prescribed the proposed treatment for the other dependency roof. “The outbuildings should be covered with slate to correspond with the other outbuilding, reroofed last fall. The woodwork appears to be solid and would probably not have to be renewed. If it did, the extra cost would be about \$100.00.”<sup>31</sup> During the summer of 1885, the plans and expenditures were authorized for reroofing the dependency, as well as the Mansion wings. A specification list prepared in September called for removing “sheathing and shingles from roofs of outbuilding and wings of Mansion, indicated on accompanying drawing by red shaded lines – if any of the rafters are found to be rotten or out of line, or insufficient in number to support a slate roof, replace or correct them, and make such additions, as may be necessary. Unfortunately, the shaded drawing no longer accompanies the document and has not been located. Sheath with common inch boards, well seasoned and sound, surfaced, and of uniform thickness – to be laid with close joints and well nailed. Cover sheathing with best roofing felt. Slate with best No.1 “Buckingham” slate, 12"x 24" – 3" lap, 10-1/2" to weather, well nailed with galvanized nails. Finish in best manner at ridges. Valleys to be properly tinned and chimneys flashed. Tin to be IX Charcoal, painted both sides, well soldered, where necessary, and made secure against leakage. Overhaul present gutters and conductors and put them in thorough repair, including painting, if necessary. Do any carpenter work, and painting, about the roofs, including repairs of cornices, necessary to put the whole in proper order. The whole to be done in a thoroughly complete and workmanlike manner, and guaranteed against leakage for one year. There will be about 46 squares of sheathing – and slating.”<sup>32</sup>



Figure 23. West room, upper-level 1959. This NPS photo shows the roof structure above the west room before the NPS installed additional joists and supports in 1964. The sheathing and rafters date to the 1880s QMC work. Joists are original.

Later that month, an examination of the roof showed that the “woodwork” of the roof was indeed deteriorated and would probably have to be renewed.<sup>33</sup> Replacement of the dependency’s wood shingle roofs with slate was also confirmed by David H. Rhodes. In an interview conducted by the QMC, Rhodes recalled that “about 1890, the shingle roof was taken off and it was replaced with a slate roof as a fire protection.”<sup>34</sup> Had there been a ceiling in the c.1860 upper-level rooms and had it not been removed during the early 1870s work on the North Dependency, it would have been lost at this time.

Much of the current roof structure installed in the North Dependency in the 1880s survives today, along with some original joists and 1960s era reinforcement (Figure 23). The mention of “additions as may be necessary” and “carpenter work, and painting, about the roofs, including repairs of eorniees, necessary to put the whole in proper order” in the September 1885 specification ended up involving significant work on the roof. Most of the original outriggers appear to have been retained even though the majority of roof joists above the center and east rooms were replaced. New 2" by 6" roof rafters were installed at approximately 2' o.c. Original joists were replaced with new circular sawn joists above the east and center rooms (excepting one full joist in each space and sleepers and other timbers framing around the fireplace above the east room). The rafters passed through the tops of the east and west walls and, at the peak, were butted together against a 2" by 10" ridge beam. Continuous sheathing was installed on the rafters.



## 1886-1929

David H. Rhodes, Arlington's landscape gardener between 1873 and 1930, stated that "from about 1885, until recently, the whole set of quarters was occupied by J.H. Marcey, greenhouse foreman, and his family, in order that he may better attend to the requirements of the greenhouses and the stock of plants, during the absence of the Landscape Gardener, who, for many years, had extensive detached duties at other points to perform."<sup>35</sup>

There is little information about the condition and work done on the North Dependency during this period. An 1897 photograph of the south elevation of the building shows much of it covered in vegetation (Figure 24). Doors that are different from those seen in the Uncle Joe and Andrew Russell photographs are visible. These doors appear dark in color and have a four-light window in the upper half.



Figure 24. Arlington in 1897. Note the extensive vine coverage. Replacement doors have glazed four-light panels in the upper half.

Photographs from around 1900 provide a better view of the doors (Figures 25 and 26). The images also show that the masonry foundation had been parged and that the projecting cornices above the doors had been removed and replaced with flat panels. (The foundation probably received the coat of stucco at the time the interior was converted to a single story space—the finish concealing infilled lower-level windows on the north elevation.) The flat panels, doors, soffit, and outriggers all appear darker than the door jambs are lighter. A screen door is installed on the center room, in keeping with its use as a residence. All three doors on the south elevation were entered after one step (a platform) above the grade level. With hinges on the west side door jamb, their swing was reversed from Civil War-era. From open doors on the east and west rooms, it is clear that the removal of the upper-level and raising of the floor to grade had already occurred by the time these photographs were taken. In one image the shoulder in the east room is clearly visible, in another image one of the north elevation upper windows can be seen in the back of the west room. The corresponding lower windows are not visible since they were filled in.





Figures 25 and 26. Photographs of south elevation, circa 1900. The photos show the replacement doors and the foundation with its stucco finish (in the 1860s the foundation was exposed masonry). More importantly, the open door to the east room reveals an exposed shoulder where the original upper-level floor joists once sat. This is consistent with the space being used after the Civil War as a single-level open room with a floor at-grade.

In 1906, both of the dependencies were included in a painting contract that also covered the toilet, well house, water tank, amphitheatre, rostrum, and temple of fame. A circular inviting bids to do the work called for painting the “entire outside of two sets servants quarters with two coats pure white lead and oil tinted light drab.”<sup>36</sup> Also that year, 6" gutters were installed on the North Dependency.<sup>37</sup> In two letters discussing the installation of the gutters, the dependencies are described as buildings that were “used as tool rooms, store room, and workshop” and “now used as tool houses.”<sup>38</sup> No mention was made of the greenhouse foreman, his family, and their supposed occupancy of the North Dependency.

There are no records to suggest that any significant work was again undertaken on the North Dependency until after World War I. In 1921, a new comfort station was built just north of the north elevation of the North Dependency. The new building connected to the dependency by a building that entered the east room of the dependency just east of the recessed arch. This work resulted in a major grade change in this area with dirt fill raising the ground level.

As interest in returning Arlington to its pre-Civil War appearance and converting it to a public house museum gained momentum, the Quartermaster General permitted Gilbert Rodier of the Washington, DC architectural firm of Rodier and Kundzin to make measured drawings of both the Mansion and the outbuildings at the end of 1923. Unfortunately, it appears that the South Dependency, but not the North Dependency, was included in the buildings Rodier and Kundzin documented.<sup>39</sup>

The following year, the 68<sup>th</sup> Congress passed Public Resolution No. 74 authorizing the Quartermaster General to restore the Mansion and the adjacent buildings in honor of Robert E. Lee “as nearly as may be practical to the condition in which it existed immediately prior to the Civil War.” Initial QMC estimates for structural changes, repairs, and refurbishing the Mansion and the dependencies came to \$160,000. In this estimate the North Dependency was already referred to as the “Summer kitchen” and the South Dependency was called the “slaves quarters.”<sup>40</sup> L.M. Leisenring, architect for the Quartermaster Corps of the War Department was to direct the restoration. Colonel Bash was in charge of construction services for the Quartermaster Corps.

Planning for the restoration continued over the next three years and no physical work was undertaken on either the house or the dependencies until 1928. During the planning process, it became clear that the restoration would not adhere strictly to Congress' request that the house be returned to its appearance immediately before the Civil War.<sup>41</sup> Instead, the restoration blended limited physical investigation with current aesthetic inclinations toward all things Colonial. However, because most of these decisions related to the Mansion interiors, the dependencies, with their bare plaster walls and utilitarian function, were probably not significantly affected.

Meanwhile, the dependencies were deteriorating. In 1926, the Arlington National Cemetery Superintendent Robert R. Dye wrote to the Quartermaster Supply Officer asking that steps be taken "to thoroughly repair, both inside and out, including painting, the Custis-Lee Mansion and the two small outbuildings that comprise the original buildings of the cemetery. these buildings are getting in such dilapidated condition that they detract from the good appearance of the place, the walls need repainting, rooves [sic] and gutters as well as a good part of the woodwork should be immediately gone over and the outside of the buildings given at least two coats of paint." The letter also acknowledged the plans to restore the buildings, but argued for immediate repairs because appropriations for restoration work were unlikely for some time.<sup>42</sup>

### **1928-1933**

In 1928, Congress appropriated \$10,000.00 to make a complete investigation and survey of the conditions of both the Mansion and the outbuildings. The Quartermaster General's office established a committee that was to oversee the restoration, conduct hearings, interview witnesses who could share information about the history of the house, its appearance, function, and furnishings, and issue a report with treatment recommendations for the Mansion and "the subsidiary buildings in the rear of the Mansion, known as the kitchen and slave quarters."<sup>43</sup>

An August 1928 letter to the Quartermaster Supply Officer included a recommended list of basic exterior repair work to be done on the North Dependency's summer kitchen (20' x 48', 1 story exterior) including: repoint and repair stone work and renew stucco; renew wood cornice; copper work, corner gutter, ridge and downspouts; exterior painting . . . totaling \$600.00.

Quartermaster General's office advised that the work "should be carried out strictly with old methods, and every detail should be carefully supervised to avoid irreparable injury to work which must be preserved in its historic character."<sup>44</sup>

Four months later, in December 1928, additional estimates were calculated, in this case for "refurnishing" the interiors of the North Dependency. The space was divided into six rooms, \$2,000.00 was allotted for the summer kitchen, with the five other rooms (including the divided center room) planned to cost \$600.00 each, or \$3,000.00 total.<sup>45</sup> Although the work was not itemized or described, this document is the first to mention the QMC's plan to divide the interior of the end rooms into upper and lower-levels and the center divided with an entrance vestibule. In two subsequent letters written by the construction service to the QMC in December, expenses for the summer kitchen were approved, including \$1,500 for the summer kitchen interior, \$800.00 for heating the summer kitchen and \$900.00 for constructing a new exterior stairs and areas for the summer kitchen.<sup>46</sup>



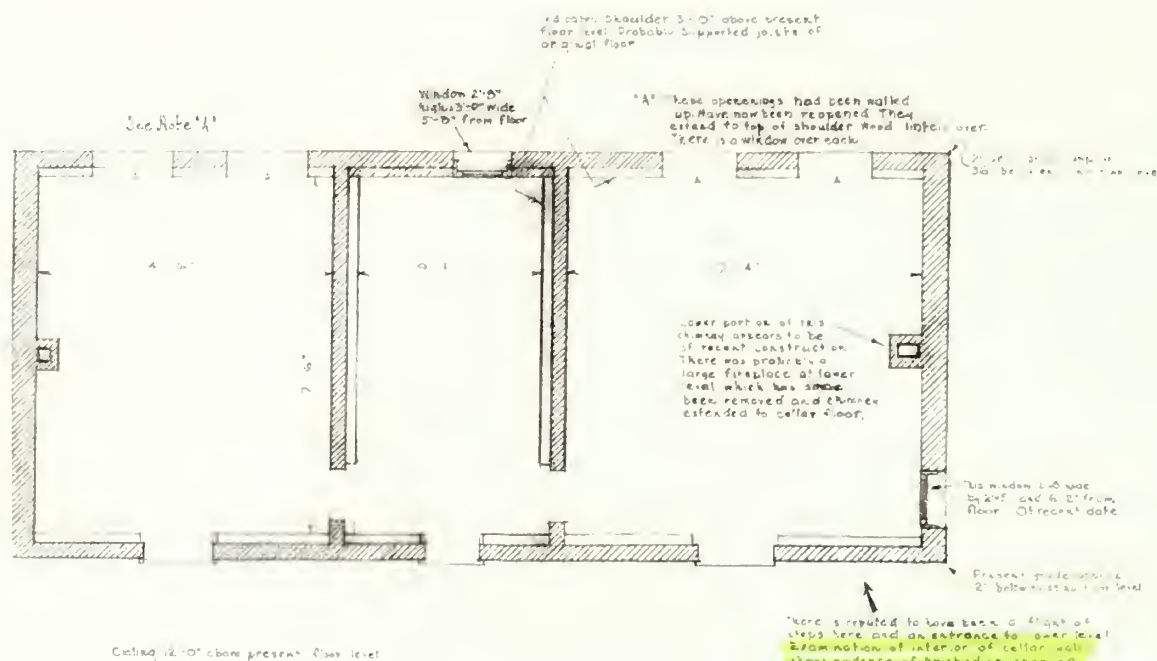


Figure 27. This undated and confusing plan seemingly shows the condition immediately before the QMC restoration, including the interiors as single story spaces, chimneys for stoves instead of fireplaces, and a window on east wall of the east room. Upon closer examination, the drawing appears to have been drawn sometime early in the restoration phase. While showing the interior as a single level, notes indicate that the windows in the kitchen (lower-level) have been reopened. Also the original interior doorways to the upper-level are shown reopened (unlike the South Dependency, interior doorways connecting the three rooms never existed when the building was converted to a single level around the 1870s).

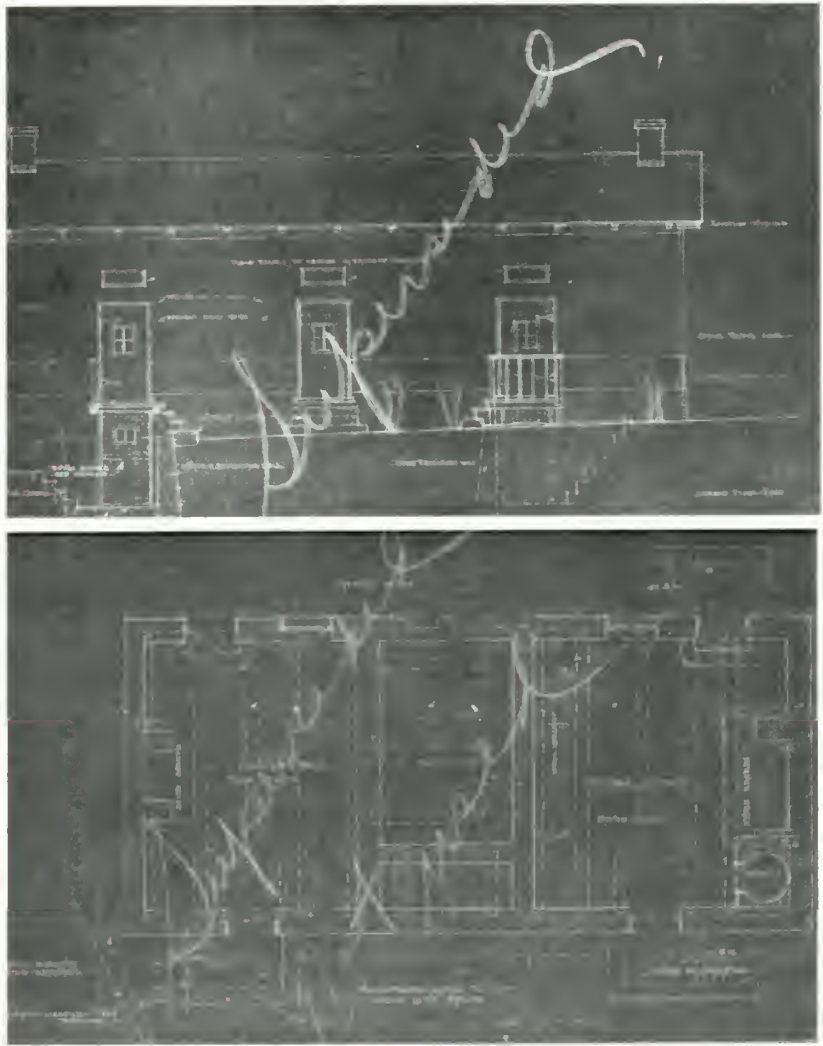
After an April 1929 meeting of the Arlington committee, L.M. Leisenring wrote to the Quartermaster General that the committee was in general agreement that “the two out-buildings and slave quarters and the summer kitchen building be restored as nearly as possible to their original condition to illustrate their original use.”<sup>47</sup>

An undated, unsigned memo from this period titled simply “Restoration General” stated, “The condition of Summer Kitchen compared to that of the Smoke House is very good. Dampness coming through the exterior walls and cracked exterior stucco, particularly on the west wall, are both items that bear close investigation.” Both buildings were “in much greater need of immediate repair than is the Mansion House.” The memo added that “the present plan of the Summer Kitchen and conditions in both are contrary to existing physical evidence as well as some documentary evidence and continued and uninterrupted, at the earliest possible date.” An indication of the uncertainty the QMC team felt over how to restore the summer kitchen was reflected at the end of this memo which stated, “There are so many as yet unfound answers to questions concerning the Summer Kitchen that no work should be undertaken there until they are resolved.”<sup>48</sup>

Apparently some of those uncertainties were resolved by May 29, 1929 when a series of instructions were provided by Colonel L.H. Bash for the treatment of the North Dependency. They included opening and cleaning all the chimneys, furnishing the fireplaces with open brick arches, and applying “old fashioned cranes and other utensils.” The exterior of the chimneys were to be covered by copper wire screening that would keep birds and squirrels from entering the chimneys. Specific to the summer kitchen, he said “Open up basement in the Summer Kitchen at the old door and window



openings. Carefully examine under competent supervision all materials taken out so that no articles or materials of historic interest and value are lost. When this excavation has been made, furnish a complete survey of the building to the QMC and after securing from him drawings and specifications, complete the restoration of this building, with floors at the old levels, with areaways and steps from the south side.” Again the Quartermaster General’s office urged that the work be undertaken with a sensitivity to the resource. “Your particular attention is directed to the necessity of taking effective means to insure that all of the work herein described is a restoration. Every effort must be made to insure that any new work, such as the reflooring or wall finish, has an antique appearance so as to perfectly match the balance of the house. The success of the job will depend on the new work being indistinguishable.”<sup>49</sup> Around this time the QMC prepared a drawing describing the North Dependency as it existed sometime early in the QMC restoration (Figure 27).



Figures 28 (top) and 29. Preliminary restoration drawings from 1929. Note the creation of below-grade entrances to the east and west lower-level rooms. The original exterior door openings were to be raised (hence the missing cornices) and provide access to the upper-level rooms.

Drawings dated September 9, 1929 show the removal of the connecting building that linked the comfort station and the north dependency. Notes on the drawings state that the walls shall be stuccoed to correspond with the present exterior walls.<sup>50</sup> A series of plan and sectional drawings were done on November 23, 1929. Most “Superseded” and “Not Used” written across. These drawings show plans to divide the end room interiors into upper and lower-levels with two sets of doors on the south elevation corresponding to the upper and lower-level rooms, and a pair of doors on the north elevation (Figures 28 and 29).

Inside, the superseded drawings show the two-level interior arrangement the QMC planned. In the east and west rooms, upper-level floor joists run north/south sitting on the extant shoulders. The fireplaces and chimneys were to be rebuilt in the east and west rooms with new concrete footings below. The east room was to have a brick oven installed to the south of the fireplace. Fireplaces were

to be constructed on both upper-level rooms. The brick floor was to be set over 2" of sand on 4" of tamped gravel fill. Existing windows in the upper-levels of the east, west, and center rooms were to be retained. The ceiling (apparently plaster on lath nailed to the existing ceiling joists) was to be removed and the "wall built up to give bearing to the rafters."

The rear center room was to have east/west running joists set into the "existing holes" in the walls. The dirt floor in the lower space was not altered but what was left of the former masonry wall in the lower space running east-west near the south end of the center room was to be rebuilt and support joists beneath the vestibule. The brick partitions separating the North Dependency into three spaces was to be extended up to the roof line.

These early drawings showed the most dramatic changes the QMC planned to make. Influenced by Jim Parks' recollection that the summer kitchen was "down below," the QMC concluded that the stairs used to reach this lower-level (at both the east and west sides of the building) were located on the exterior of the south elevation and the upper-level east and west rooms would be reached by exterior stairs and landings. (Parks was interviewed sometime before his death on August 21, 1929. His assertions about the below-grade kitchen were corroborated on December 16, 1929 when the Gray daughters were interviewed, though in other areas, as has been noted, their memories varied and were at times contradictory.) One note on the undated drawing done sometime before the restoration claims, "There is reputed to have been a flight of steps here and an entrance to lower-level. Examination of interior of cellar wall, shows evidence of bricked up opening." Because the QMC had access to Russell's 1864 photographs (but not the Uncle Joe photograph), they knew that such an arrangement did not conform to the 1860s configuration. Instead, they might have reasoned that this arrangement was either the original plan or at least that it existed before the time when the Lee's left Arlington, although neither point is raised in written records. However, it is more likely that this interpretation had more to do with the exigencies of moving visitors in and out of the newly restored space. The QMC did not understand nor consider returning the interior to the more complicated floor and circulation arrangement that the current investigation has revealed to be original to the structure.

The QMC also planned to remove the infill material from the lower-level openings on the north elevation where old wood lintels existed beneath the stucco that then covered the foundation. They intended to put nine-light windows in the openings closest to the recessed arch in the center of the façade, and put doors with transoms on the outer openings. Because the grade sloped downhill from east to west along this elevation, the door that corresponded to the east room would have been partially below-grade. The belief that two of these openings were originally doors was based upon Jim Parks' oral history, though their existence was refuted by the Gray daughters when interviewed in December 1929.

In fact, two days after meeting with the Gray daughters, L.H. Bash of the QMC wrote of revised plans for the restoration of the North Dependency:

With reference to the summer kitchen (North Outbuilding), it has been decided to modify the plans for this building as shown on Drawings Nos. 6608-182 to 189 inclusive to the extent of omitting the two end doors on the south front leading to the attic floor, together with the wood platforms and stone steps to these two doors and to fill this opening with a recessed panel; also to retain the old door openings now in the brick crosswalls at



the attic floor level, and to place under the existing oak lintels, doors and steps leading from the upper attic to the lower attic entrance level. It has also been decided to omit the north doors into the two end basement rooms of this building and to fill the original openings with windows. Detailed drawings of these changes will be furnished to you at an early date.<sup>51</sup>

Bash's letter suggested that the QMC was altering their previous design plans based upon the interviews conducted with the Gray daughters who asserted that there were no doors on the north elevation. Because the recollections shared by the Gray daughters have survived only piecemeal, their opinion of the proposed installation of exterior stairs below-grade is not clear. It is possible that the Grays took exception to the proposed placement of doors providing access to the east and west upper-levels set directly above the lower-level doors, for in Bash's December 18, 1929 letter, these upper doors were omitted from the proposed design.

Just after the new year began, the QMC issued a series of revised plans for the North Dependency. With the exception of the changes Bash mentioned in his letter two weeks previous, the general restoration plan remained the same. Interior plans and sections showed each space divided into an upper and lower-level, lower-level windows on the end rooms were opened on the north elevation;

steps descending to the lower-level were placed below-grade on the south elevation; and the lower-level of the east room was interpreted as a summer kitchen. The east and west room upper-levels were reached through the original door openings on the upper side walls of the center room. These openings would have 4" oak sills installed and plank doors with wood latches and strap hinges. The sill would be reached by three steps (two oak steps and the masonry shoulder). A partition would divide this entry vestibule from rear living quarters, set one step above the vestibule level. The partition, made of random width, vertically set wood planks, was directly above a masonry wall that was supposedly rebuilt from the remnants of an early masonry wall that survived in the lower-level. Because this lower-level was marked "not used," it retained its dirt floor and was accessible only by a 2'x 2' trap door installed along the east side of the center room living quarters (Figures 30 and 31).



Figure 30. North elevation, final elevation for the QMC restoration, 1930. Note reopened lower-level east and west room windows.

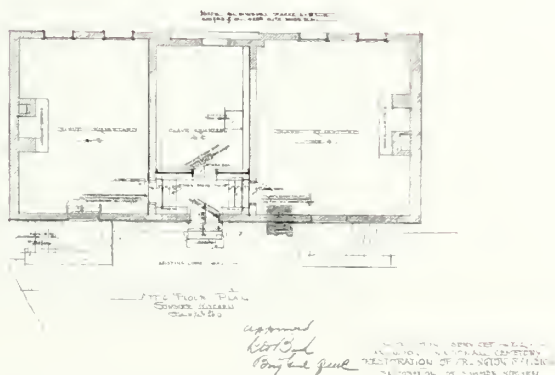


Figure 31. Upper-level, final QMC restoration plan, 1930. Note below-grade entrances to lower-level east and west rooms, reconstructed fireplaces, center room vestibule partition, and reopened historic openings from center room vestibule to east and west upper-level rooms.

Drawings of the south elevation show the flagstone steps leading down to the lower-level entrances, stone landings, stone retain





Figure 32. South elevation, 1933 photo. Shows building after QMC restoration. Changes include insertion of a reproduction vestibule partition in the center room; infill of the east and west room historic door openings; the shift upward of all three door openings (obliterating the door cornices) in order to accommodate the two below-grade entrances to the end rooms; and removal of approximately 2' wide band of rough cast finish to align it with the midpoint of the raised door openings.

ing walls, and the three stone steps leading from grade to the center room entrance. The two lower-level openings had wood plank Dutch doors with strap hinges and two light openings in the upper half, while the center room door was a plank door with a four-light sash set in the upper half. To accommodate the doors below-grade, new lintels were installed above the previous door threshold. To retain the proportion of the upper door openings, they were correspondingly shifted upwards on the wall. To provide space above, the cornices over each of the earlier door openings were removed and these spaces, as well as the earlier door openings, were infilled, though recessed several inches in from the wall plane (Figures 32 and 33).

The stucco finish was to be removed from the masonry foundation and the lower portion of the rough cast finish was stripped from the wall. By revealing the masonry, the QMC raised the line between the exposed masonry and rough cast to correspond to the position of the infilled door openings. Revised sets of drawings also included details of the wrought iron L-shaped window hinges, strap hinges for the doors, and pot hooks and cranes for the fireplace.<sup>52</sup>

It is not clear when physical investigation of the North Dependency continued into actual preparatory demolition and restoration work. However, in March 1930, there was an interesting find in the North Dependency. Brig. Gen. Bash wrote, "The fork attached hereto was found yesterday, stuck in the wall of the summer kitchen at Arlington Mansion. It should be preserved and put back into the kitchen when it is furnished."<sup>53</sup> At the end of March a quarterly report stated that remodeling of the mansion and outbuildings was underway.<sup>54</sup>

The following month, Bash prepared another set of estimates for the Mansion and dependencies. Completing work on



Figure 33. South elevation, closeup of below-grade entrance to summer kitchen and infilled historic door opening following QMC restoration. The upper two feet of the stone foundation wall was exposed and the infilled door area was raised into the area where a cornice had been located historically.



Figure 34 (top left). East room lower-level, 1959 photo showing conditions after 1930 QMC restoration of summer kitchen. Note reconstructed fireplace and exposed joists for upper-level floor

Figure 35 (top right). Center room looking south, 1959 photo showing 1930 QMC restoration of the space as a living area behind an entrance vestibule. Note 1880s roof rafters, sheathing, and replacement joist (on left), original joist on the right.

Figure 36 (left). West room lower-level, 1959 photo showing 1930 QMC restoration of space as a living area. Note reconstructed fireplace and window openings reopened.

both dependencies would cost \$1,000.00. Guard grating for both buildings came to \$500.00 with another \$500.00 spent on utensils for both buildings. An additional \$150.00 would be required for planting around the summer kitchen and public toilet as per a sketch approved by the Fine Arts Commission.<sup>55</sup> Around this time Mortimer requested (and received approval for) a QMC truck to pick up a load of “old brick” from Seven Pines National Cemetery in Richmond for use in connection with the Arlington restoration. There is no further indication of where this brick was installed, though at least some of it was likely used on the lower-level floors in the North Dependency east and west rooms.<sup>56</sup>

Quarterly reports filed in June and September 1930 noted “Remodeling of mansion and outbuildings in progress.”<sup>57</sup> At the end of October, Everett Chase wrote to Mortimer noting that he was at Arlington recently with a “gentleman of Virginia who knows considerable about outbuildings” and concluded that the original exterior finish was a smooth stucco rather than the pebble dash which was added later.<sup>58</sup> A progress report from two months later stated that all the work had been completed with the exception of restoring the mural paintings on the panels above the doors “as no artist has been secured for this work,” and final outfitting of the space with utensils.<sup>59</sup> Despite this, quarterly reports from December 1930 and June 1931 continued to note that the restoration of the Mansion and the outbuildings was ongoing.<sup>60</sup>

Exterior photographs from the 1930s (Figure 32) show that the final construction drawings were



followed. On the east and west sides, the historic door openings were infilled with a recessed stucco face; doors were opened on the lower-level; and steps were installed below-grade leading to these doors. A railing was placed around the stairwells. The cornices above each door were removed and the infilled door opening were raised. Rough cast finish was removed from approximately 2' of the lower facade revealing the remainder of the masonry foundation, in order to retain its relationship to the door openings.

Interior photographs of the completed QMC work (Figures 34-36), most dating from the NPS era, show the summer kitchen installed in the east room lower-level, with a fireplace, oven, cupboard, work bench along the west wall, and other furnishings. A fireplace was reconstructed on the upper and lower-level of both end rooms (according to the QMC, in the same place as the original hearths.) The brick oven configuration and dimensions were based on one found in a house in Baltimore. Iron hardware for the oven was apparently acquired from the same Baltimore house.<sup>61</sup> The two upper rooms in the east and west rooms and the lower room in the west room were interpreted as living quarters with beds and tables. The center room was divided into a forward vestibule separated from a rear living area by a plank partition.

In July 1933, an Executive Order #6228 transferred Arlington House from the War Department to the Department of the Interior. A couple months later, before the transfer officially had taken place and only a few years after the restoration was completed, the Quartermaster Corps planned to repaint and repair the slave quarters and the Mansion. This work was made necessary by "certain deterioration in joints, woodwork, etc., which require new putty stoppings and repairs to plaster and woodwork, also repairs to down spouts, gutters, etc."<sup>62 63</sup>

Later that year, day-to-day operation of Arlington came under control of the National Park Service. Department of the Interior Assistant Historian Elbert Cox met with Colonel Mortimer and L.M. Leisenring to learn details of the restoration that had been completed just a couple years previous. Cox later described the conversations, saying that Mortimer "could tell me only generally the historical background or justification for the various improvements, but said that each item was a part of the general plan for the restoration of Arlington which L.M. Leisenring, architect in the office of the Quartermaster General, had made and which had been approved by the Fine Arts Commission and then by the Quartermaster General." Cox went on to state that:

Leisenring very generously spent an hour or more telling me what he had done, and the basis for his plans for the restoration and improvement at Arlington. It seems that no thorough or complete study of or search for full historical data on Arlington has been made. Mr. Leisenring has studied the problem, has gathered what data he has been able to, and as a result of his studies and his thoughts on the problem has drawn up plans. In my opinion before having had a chance to go into the matter with any degree of thoroughness, Mr. Leisenring has worked with considerable feeling toward a faithful and appropriate treatment of his problem.<sup>64</sup>

## **1934-1956**

Records relating to any maintenance or alterations of the North Dependency during the 1934-1956 period are scant. NPS apparently continued the interpretive program established by the QMC restoration throughout this time. In 1941, the Historic American Buildings Survey (HABS), a Public Works Administration Program, undertook the documentation of Arlington's primary structures.



Among the eighteen sheets of drawings produced at least nine were of the North Dependency. These drawings included upper and lower-level plans, all four elevations, longitudinal and transverse sections, and details of a wood lath, the fireplaces, and an oven on the east wall.<sup>65</sup>

In 1944, the assistant superintendent asked that the "... stairways to the basement of the North Servant's Quarters be repainted as this work was not completed last year ..." By stairways, it is assumed that the request referred to the railings above the stairways.<sup>66</sup>

## 1957-1964

The NPS undertook plans for a restoration of the North Dependency in order to correct what it viewed as inaccuracies in the 1929 QMC restoration. Starting in August 1957, they began to compile historical information, conduct inspections of the North Dependency, and draw up a list of tasks that would be included in the project.<sup>67</sup> While activity at the South Dependency focused on general repair concerns, work planned for the North Dependency involved major restoration and reinterpretation.

A weekly inspection report from August 28, 1957 noted, "Investigation of the summer kitchen revealed a lower truss member at the west end which might need replacing. The exterior of the west wall is in need of repair or restoration." The following month, NPS established that the South Dependency would be treated first due to its poor condition, then the North Dependency, and finally the Mansion.<sup>68</sup>

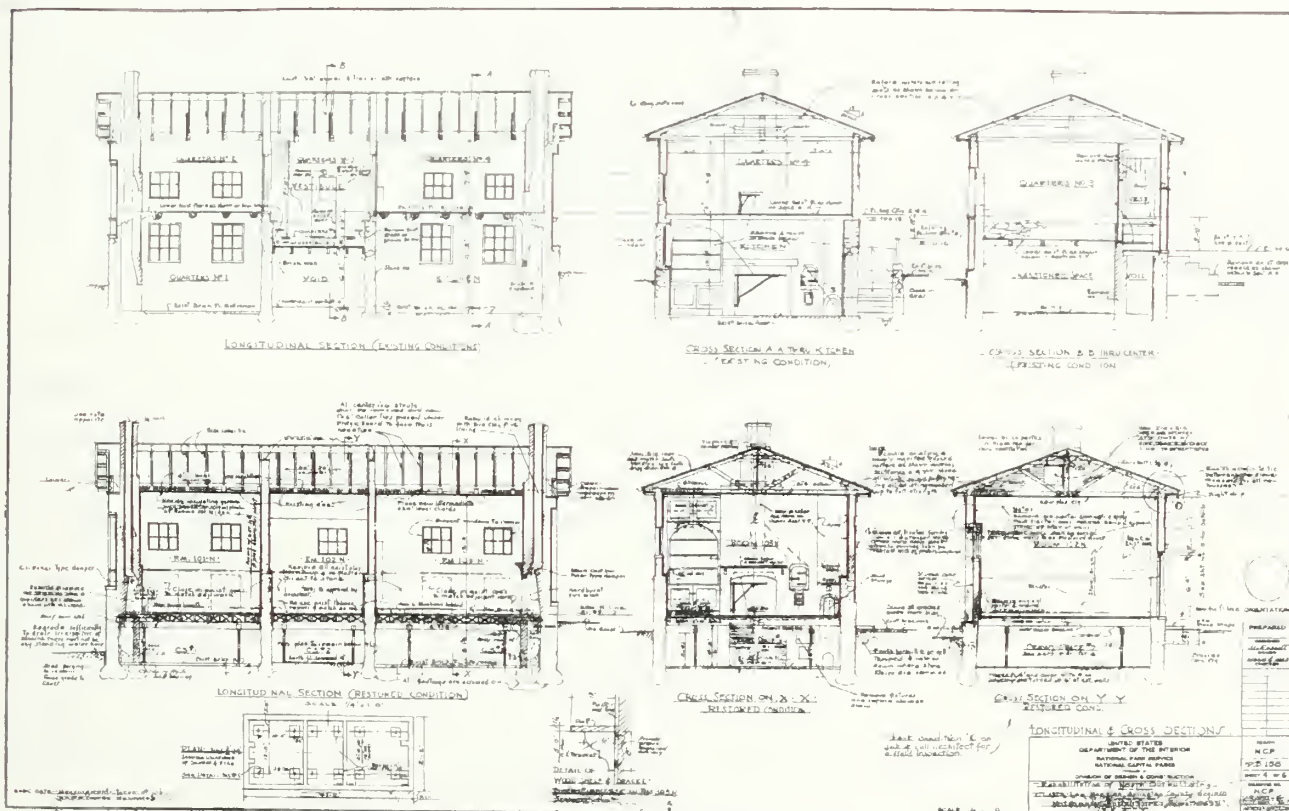


Figure 37. 1960 section drawing depicting the NPS intention to restore the North Dependency interiors to single story spaces with a summer kitchen, living quarters, and entrances on grade. The existing plans are shown above and the proposed restoration plans are below.

It is clear from surviving drawings that NPS was determined to reconfigure the North Dependency's interior and exterior as a single story space. Their original interpretation was based upon the Russell photographs which clearly showed entrances to the summer kitchen and west room at-grade on the south elevation. NPS was certain that the QMC restoration, particularly its below-grade entrance to these rooms, did not correspond to the appearance of the building immediately prior to the departure of the Lee family in 1861.

As a result, NPS architects and historians proposed removing the QMC upper-level, filling in the windows on the north elevation and the interior doors to the center room, discontinuing use of the lower-level, moving the single floor to grade, and reinterpreting the summer kitchen at-grade. Drawings dating to July 1959, illustrated the existing condition of the North Dependency before the NPS began their restoration. The elevations, sections, and plans correspond closely with the 1940 HABS drawings and the final restoration drawings prepared by the QMC in January 1930.

Another set of drawings with dates between September and November 1960 are the first to show the NPS proposed restoration (Figure 39). The slate roof was to be replaced with a tile roof to match the newly restored South Dependency roof; the existing gutters and downspouts were to be replaced with materials to match. New flashing and counter flashing were to be installed on the chimney and a new clay flue lining installed. Along the south exterior, the NPS planned to infill the lower doors to the east and west rooms with stone to match adjacent work, reopen the doors at-grade and reinstall cornices above, and reapply a rough cast finish over the masonry that had been uncovered during the QMC restoration.

Additionally, the slope to the south elevation entrances was to be relaid so that the existing brick walk and the new brick blended. New stone steps were to be set in front of the entrances to suit the new grades. The five existing outriggers on each of the east and west elevations (two beneath each eave and one beneath the ridge) were to be reconfigured to four outriggers per pitch (eight total per side). Drawings called for replacing the two "lower wood sills" and repointing the lower masonry wall on the west elevation. No major changes were planned to the east and west elevations, though localized repairs were to be made to the stucco and rough cast finish, and some areas were to be repointed. Lower-level windows on the north elevation were to be infilled, with rough cast on the upper portions and stone on the lower.

Some time between the start of planning for the NPS restoration and the beginning of the work in 1964, large sections of plaster were removed from the lower-level of the east room "for study purposes." This was apparently undertaken as part of research for the HSR in an effort to identify an earlier floor level near grade.<sup>69</sup>

The rehabilitation log began on July 6, 1964, stating that plaster was removed from the interior walls of the east and west rooms.<sup>70</sup> In the center room, the partition dividing the rear living quarters and forward vestibule was partially demolished as were the floors of both areas. Wood railings were removed from around the basement entrances. It was decided that the surviving plaster on the walls of the east room lower-level would be left as is. The log also noted that there was an area of hair plaster in the left corner of the east wall (probably referring to the nineteenth century QMC plaster used to patch the walls after the upper-level floor structure was removed).



The following day, as more plaster was removed, the infilled window on the south side of the east wall in the east room was uncovered. Also that first week, the roof structure was strengthened with braces and additional Douglas fir 2"x 6" joists placed between the existing joists. Some plaster was removed from the center room. Sash on the lower-level of the west and east rooms were removed and the openings infilled, while the brick ovens on the east wall of the east room were removed down to the floor level at-grade.

On July 20, workers uncovered what they believed were signs of a former floor level in the center room. The log stated that, "On the west and north walls of this room there was evidence of a floor line which existed when restoration of this building was started." In another section the description was more detailed, noting that "Mr. Roberts, architect, took photographs of floor line shadow about six feet above the basement floor and below the existing floor. This floor line shadow was most in evidence on north wall. There were therefore, according to Mr. Roberts and Mrs. Agnes Mullins,



Figure 38. Looking west from east room upper-level into center room through the doorway, 1964 photo showing NPS removal of QMC upper-level floors in progress, and additional joists (those unpainted) inserted between the older joists.



Figure 39. East room upper-level looking east, 1964, showing NPS investigation of fireplace and removal of upper-level floor in progress.



two floor line shadows in this center portion of the building. One above the existing floor and one below it. There were patches of plaster on north wall near floor line, samples of which will be removed for study just before plastering is begun.”<sup>71</sup>

During the next week, the chimneys above the roofline of the east and west rooms were removed and work started on widening the flues. Bricks were saved for rebuilding. On July 27, the exterior doorways to the east and west ground floor rooms were reopened after having been infilled by the QMC during their restoration. Also that day, NPS photographer Abbie Rowe took photographs of all the interior walls in each room, as well as exterior views.

Rowe’s photographs from July 27, 1964, show work underway in the interior of the North Dependency (Figures 38 and 39). Plaster had been removed from the wall surfaces in the upper-level rooms. Strips from 2' - 5' wide, where the plaster had been removed exposing the masonry walls were visible along the lower-level walls. This was clearly a result of the NPS historians search for evidence of an original floor location near grade. Areas near the fireplace and doorways also had significant areas where plaster had been removed in the search for clues to the historic configuration of these spaces. The photographs show that the east and west doorways at-grade on the south elevation had been opened up, but that the center room door had not yet been lowered to its 1860 position (after having been raised and the cornice removed as part of the 1929 QMC restoration). At the time Rowe took his photographs, the upper-level interior doors into the center room were still opened up and the oak sill is visible above the east door. The new, unpainted joists and braces added to the roof structure the previous week are clearly visible next to the older whitewashed joists.

On July 28, 1964, the day after Rowe visited the North Dependency, work began on removing the QMC upper-level. On this day workers found evidence that caused them to completely alter their plan for restoring the summer kitchen at-grade. The log noted that in the east room basement (lower-level), “Removal brickwork continued, thus exposing the east wall of the room behind the fireplace. As work progressed, Mr. Dodson noticed a floor line on the wall as well as a stairway shadow, and what appeared to be evidence of a shadow line of a narrow chimney. Mr. Roberts’ office was notified immediately and Mr. Roberts arrived to inspect the wall. There were also patches of plaster in an egg shell blue shade on this same wall. Mr. Dodson will remove samples of this plaster for study purposes just before the room is replastered.” The following day’s entry read, “As a result of Mr. Dodson’s discoveries, Mr. Roberts changed the plans for rebuilding the fireplace on the second floor in the east room. The remains of the fireplace in this basement room were sealed up with cement blocks.” The log also stated that “As a result of evidence uncovered in east room of the basement, Mr. Roberts authorized Mr. Dodson to completely remove fireplace and chimney from this room [the east room]. Instead of the planned fireplace in this room, only a narrow chimney with a hole for a stove pipe will be built.”

The discovery of a floorline along the east wall is not surprising, for it is clear that a floor-level existed near grade between sometime after the Civil War and the beginning of the QMC restoration. The egg shell blue shade of paint on plaster which was discovered dates to this same time. What is unclear, is the possible presence of a “stairway shadow” along this wall. The location of the chimney along this wall, the QMC discovery of a hearth remnants in 1929, and the fact that the door swing in the Uncle Joe photograph directed traffic either straight or toward the west, and practical consideration in regards to the functioning as a kitchen all suggest that stairs would not have origi

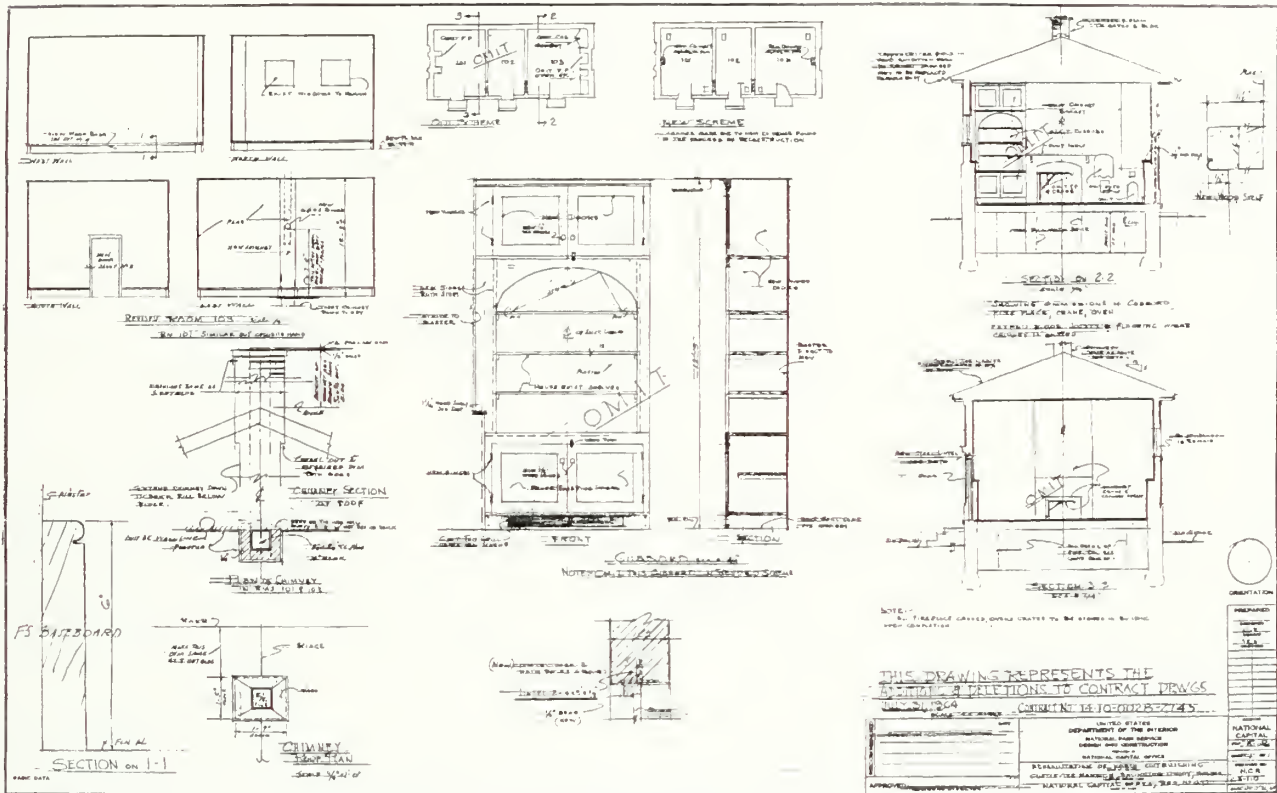


Figure 40. 1964 drawings showing NPS plans for a grade-level summer kitchen omitted.

nally existed on this wall plane. If the QMC installed the stairs following the Civil War, when they reconfigured the interior space to a single floor, it would have reached a small, uninhabitable attic space that could have been used for storage (space would not allow a floor-level at-grade and an upper-level floor set on the shoulders to coexist).

From the descriptions provided in the log and remaining physical evidence today, it is clear that whatever NPS identified along the east wall would have had to be located about 1' above the current grade level (below which the remnants of the summer kitchen brick ovens were not removed) and below the shoulders where the upper-level floor was once located. The physical evidence today, including historic plaster, does not indicate that a stair was at this location circa 1860.

On July 31, 1964, the National Capital Office of Design and Construction, issued a new series of drawings with “omit” written across plans for the at-grade fireplace, oven, and cabinet (Figure 40). A note stated that “change made due to new evidence found in the process of reconstruction.” The rest of that week as well as the first two weeks in August were spent removing the old chimney above the newly planned floor at-grade, filling in the fireplace openings, and installing the new floor levels in the center and west rooms. Work was also undertaken on the south elevation, including installing door frames, filling in the basement entrances, removing stone steps down to the basement, filling the stairwell with rubble and laying concrete over top, and installing the stone steps up to each doorway. The area in front of the south entrances was then graded and the stonemason completed work around the new steps.

Later in August, workers began to build the new narrow chimneys in the east and west rooms. Also, holes in the walls were filled in preparation for plastering and the building was wired for electricity

including the installation of lights in the newly created cellar areas. Slate was removed from the roof and outriggers on the gable ends were rearranged to match the South Dependency (four per side of the roof). Woodwork running the length of the south exterior eave was replaced, while other woodwork was inspected, scraped, and treated with a wood preservative. All roof timbers were checked and replaced where necessary. The work log stated that approximately 200 square feet of roof sheathing was replaced before new tar paper was laid on the surface.

Also in August, drawings were made for a proposed restoration of the murals above the doors on the south elevation. The work was to be carried out by the museum lab as the "existing murals have become unrecognizable." It included drawings of the existing murals on the south building and called for matching these murals in style and color.

During the first half of September, ceiling insulation was installed in the east and center room attic. Workers also completed laying the floor in the east room. Planks from the previous floor were used as floor boards. Scraping and treating exterior woodwork was completed; the brick sidewalk running parallel to the south elevation was removed; and the rain gutters were replaced. The last entry in the log was on September 10, 1964, stating that work on the roof continued.

When work was complete, each of the three rooms had a "floating" floor at-grade that was not set in wall pockets or shoulders, but rather cantilevered over four steel posts. The posts were anchored into reinforced concrete footings approximately 1' deep and 30" square. Below the "floating" floor, brick flooring remained from the QMC restoration in the east and west cellar spaces. In the center room cellar, the dirt floor was lowered 4" for an unknown reason. Each of the rooms at-grade were replastered with between 1" - 4" of gypsum plaster and the shoulders leveled off with a wood shelf.

Some time after the 1964 work was completed, a book store was set up in the west room. A wall and shelf system was installed in the space to provide display areas. The center room functioned as a store room for the bookstore, while the east room was used as a dressing room for costumed interpreters.

Little change occurred to the North Dependency during the late 20th century. The 1965-2002 west room interior periodically was updated.

A 1975 "as built" drawing from the National Capital Parks Office of Professional Services shows fire detection installations as of that date. It noted that there was an existing 4" conduit leading from the east end of the south elevation to the Mansion and a second existing 4" conduit leading from the eastern part of the north elevation to the comfort station. New detectors were installed on the ceilings of the ground floor rooms and the cellar rooms with a new 4" conduit leading to junction boxes along the north wall of the east room cellar.



## End Notes

- <sup>1</sup> Elizabeth Randolph Calvert (1833-1911) "Childhood days at Arlington Mixed with After Memories" (1845) written in 1875, page 6 (granddaughter of Mary Randolph and a cousin of Mrs. Lee) catalogue #2514 – ARHO files.
- <sup>2</sup> "The foundations of the two remaining outbuildings, flanking the old western carriage entrance, are of quarry stone." . . . the same as those of the two wings, pointing to the possibility that they were constructed at the same time as the wings dated at 1803-1804. (L.M. Leisnring, 1945, 14) In his book, Nelligan stated, "That the outbuildings and the stable had stone foundations like those under the service wing of the mansion would indicate that they were probably built at the same time as the latter." Murray Nelligan, *The Robert E. Lee Memorial*, 147
- <sup>3</sup> Areas of the North Dependency, especially on the west wall, show more definite examples of a color-wash applied directly to the brick.
- <sup>4</sup> Hartford Insurance Company, Hartford, CT, Insurance application of Robert E. Lee; Lee states that both of the slave quarters were "covered with wood." October 17, 1859.
- <sup>5</sup> Calvert, 6.
- <sup>6</sup> In 1983 archeological excavations in the cellar beneath the south wing of the main house revealed brick floors that date to the original construction period. The northern half was laid in a herringbone pattern while the southern half was "unpatterned" — probably referring to a common run brick pattern. John F. Pousson, *Archeological Excavations at Arlington House, The Robert E. Lee Memorial*, Washington, DC: Department of the Interior, National Park Service, April 1983, 29.
- <sup>7</sup> Correspondence from Mrs. Lee to G.W.C. Lee, October 1, 1851, Freeman MSS, Virginia State Library; Nelligan, op.cit, p.340; C.W. Snell, 1982, 34.
- <sup>8</sup> Agnes Lee, MSS Journal, entry for June 11, 1855. Nelligan, *Old Arlington*, 376.
- <sup>9</sup> R.E. Lee to Mrs. Anna M. Fitzhugh, Arlington, November 22, 1857; *id.* to G.W.C. Lee, Baltimore, January 17, 1858; *id.* to *id.* Arlington, May 17, 1858, Duke MSS – cited in: Joseph C. Robert "Lee the Farmer." *Journal of Southern History* Vol. 3, Issue 4 (November 1937), 431.
- <sup>10</sup> Alexandria County Land Tax Books, 1857-1861 (MSS, Virginia State Library) cited in: Joseph C. Robert "Lee the Farmer" *Journal of Southern History*; Vol. 3, Issue 4 (November 1937), 436.
- <sup>11</sup> During both the QMC restoration and the NPS restoration, officials believed that the east room cellar (housing the summer kitchen) was in filled some time before 1859, when Lee listed both the buildings as single-story structures. When the QMC began their 1929 restoration, they started with an east room that had a floor at-grade. They assumed that the summer kitchen was abandoned and the floor-level raised to grade by the Lees. Without benefit of the Uncle Joe photograph which showed that the interior was, in fact two levels as late as the Civil War, but which wasn't obtained until 1962, the NPS restoration team also looked for a time when Custis or Lee might have undertaken that work. Both Custis' work in 1851 and the Lee's remodeling in 1855 were considered possible occasions when the summer kitchen was filled in and the entrance was placed at-grade. As late as C.W. Snell's 1982 report (decades after the Uncle Joe photograph suggested a lower-level existed in the 1860s), historians were looking for an antebellum repair campaign at Arlington during which the floor may have been filled in. See: C.W. Snell, 1982, p33.
- <sup>12</sup> Hartford Insurance Company, Hartford, CT, Insurance application of Robert E. Lee; Lee called the building "a one-story brick store house." October 17, 1859.
- <sup>13</sup> In a 1934 fire protection report (after the North Dependency had been restored to a two level interior space), the QMC referred to the building as a "one story and basement structure with walls of brick and stone." April 17, 1934 – *Report of Fire Protection for Lee Mansion*, DOI, Master Data File, 1930-34 – ARHO.
- <sup>14</sup> Nelligan, 419. Nelligan quotes a letter from Markie Williams to Mrs. Lee.
- <sup>15</sup> Nelligan, 430.
- <sup>16</sup> 1929 interview with "Uncle Jim" Parks – Memorandum; A slave on the Arlington Estate from his birth

in 1848 until 1925, he was an outside servant, a farm hand, who seldom had occasion to enter the house in the early days. His father George Parks, however, was the Arlington House cook and lived above the summer kitchen. Jim Parks was employed by the War Department as a consultant during their restoration of the Arlington Mansion.

<sup>17</sup> Interview with Mrs. Emma Syphax and Mrs. Sarah Wilson (the Gray sisters) December 16, 1929.

<sup>18</sup> 1929 interview with "Uncle Jim" Parks – Memorandum.

<sup>19</sup> Accession Number 2378. The small photographic image, attached to a visiting card, was donated to Arlington by Mrs. Ada Van Horn Hunter of Long Beach, California. The NPS accessioned the item in 1962. Mrs. Hunter was the daughter of Major General Daniel Webster Van Horn, who was stationed at Arlington during the Civil War and, according to Mrs. Hunter, became friends with Uncle Joe. The card came with information referring to Uncle Joe as "General Lee's slave who refused to leave the old Arlington home when it was confiscated." In her correspondence with the National Park Service, Mrs. Hunter also mentioned that Uncle Joe was "General Lee's personal servant." Curiously, there are no slaves named Joe listed in the 1858 census of slaves then residing at Arlington. It is possible that Joe was not listed because he accompanied Lee on his travels with the Army. The words "Cross Photographer, Ft. Richardson, Va." are printed on the backside of the card. This information helps date the image at some point after November 1862 (when the fort's namesake died at Antietam). The fort was part of the Arlington defense line constructed at the beginning of the Civil War. D.H. Cross is also listed in a directory of photographers who applied for licenses during the Civil War era. The entry states that Cross was based at Ft. Richardson and that he purchased a license in April 1864. Ross J. Kelbaugh, *Directory of Civil War Photographers. Volume I, Maryland, Delaware, Washington DC, Northern Virginia, West Virginia* (Baltimore: Historic Graphics, 1990), 91. Cross' license, required under the Internal Revenue Assessment Act, cost \$25. This was the highest category of license fee, covering annual receipts over \$1,000.00.

<sup>20</sup> The stones in question are no longer present on the building, having been removed during the 1929 QMC restoration to install a lintel for the new, below-grade, door opening.

<sup>21</sup> Annual Report of the Secretary of War, 1865 (Washington, DC), Government Printing Office, 1866, I, 257. Quoted in Nelligan, 444.

<sup>22</sup> April 1869 – MR (132) (Thompson R. East, Super.) – ARHO files.

<sup>23</sup> December 1870 – MR (132) (E.H. Harner, Superintendent) – ARHO files.

<sup>24</sup> See MRs for August, September, and October 1871 – ARHO files.

<sup>25</sup> Nelligan, 443.

<sup>26</sup> David H. Rhodes, Landscape Gardner at Arlington From April 14, 1873 to March 1930. "Historic Memories of Arlington National Cemetery," photocopy of a typed manuscript; from files obtained from Jen Hanna.

<sup>27</sup> May 1874 – MR – ARHO gray binder file.

<sup>28</sup> June 10, 1878 – The cost was not to exceed \$675.00. QMG office, Master Data file 1869-1882 – ARHO files.

<sup>29</sup> August 1884 – MR (131).

<sup>30</sup> September 1884 – MR (131) "One of the outbuildings connected with the Mansion, mentioned in the last report as being in bad condition, has been covered with a new slate roof by direction of the Depot Quartermaster." – ARHO files.

<sup>31</sup> May 26, 1885 – Letter from William H. Owen to Lt. Col. R.N. Batchelder, Depot QMG in charge of National Cemeteries.

<sup>32</sup> September 3, 1885 – Quartermaster General files specification list – ARHO Files. Though the specifications include mention of accompanying plans and a map, a 1984 notation by historian C.W. Snell stated that, "The maps and plan according the specifications could not be found." No record of the plans or map were located among the Quartermaster General files at the National Archives.

<sup>33</sup> QMG letter - Sept 14, 1885 – ARHO files.

<sup>34</sup> Rhodes, "Historic Memories of Arlington National Cemetery."

<sup>35</sup> Ibid.

<sup>36</sup> April 6, 1906 – Public poster and circular inviting paint bids File No. 213212 – ARHO files.

<sup>37</sup> May 12, 1906 – “QMG authorizes expenditure of \$55.00 for furnishing and putting [in] place guttering on two sets of servants quarters now used as tool houses at Arlington National Cemetery.” QMG Doc. File 1890-1914, Doc. File No. 213212 – ARHO files.

<sup>38</sup> May 12, 1906 – QMG Doc. File 1890-1914, Doc. File No. 213212, ARHO Files (to be filed) and April 30, 1906 – Correspondence from Superintendent to Quarter Master, File No. 213212 – ARHO files. Installing gutters on both dependencies required 188' of 6" gutters, 77' of spouting and 11 elbows at a cost of \$55.

<sup>39</sup> *Architectural Forum*, Vol. 40, No. 3 (March 1924). pp. 89-96.

<sup>40</sup> July 9, 1925 – Letter gives cost estimate for restoring Arlington House – “a) structural changes and repairs, painting, etc., to the Lee Mansion and the two adjacent dependent buildings generally described as the summer kitchen and the slaves quarters - \$60,000; b) refurbishing these buildings - \$100,000.00 (+ \$92,000.00 for new bldgs.) – Master Data File 1924-29 – ARHO file.

<sup>41</sup> October 26, 1925 *New York Times*, Master Data File 1924-29 – ARHO file.

<sup>42</sup> December 27, 1926 – RG92/Entry 1891/Office of QG Geographic file 1922-1935/Box 67/File 600.3.

<sup>43</sup> Letter from Colonel L.H. Bash of the QM Corps. R.G. 92, Entry 1891, Box 67m file 293, Lt. Col. Charles G. Mortimer was the depot Quartermaster supply officer who had been supervising the work on Arlington House and dependencies since August 1, 1928; C.W. Snell, 1982, 173. The committee included a retired general, a War Dept. architect, Fine Arts Commissioners and representatives of Quartermaster Corps.

<sup>44</sup> August 1, 1928 – Correspondence to Quartermaster Supply Officer, Washington General Depot, Washington DC on the subject of the Restoration of Lee Mansion, Arlington Cemetery, Virginia. (L.M. Leisenring collection).

<sup>45</sup> “Restoration of the Custis-Lee Mansion – Arlington Cemetery” from Leisenring Furnishing Files.

<sup>46</sup> December 11, 1928 – Correspondence to QM General, from construction service, and December 13, 1928 – Correspondence to QM General, from construction service. QM file QM 600.3 C-ED – ARHO files

<sup>47</sup> April 18, 1929 – War Department, Office of QG, Report from L.M. Leisenring to QG, Subject: Restoration of Arlington Mansion – ARHO file.

<sup>48</sup> Restoration General, n.d. (Leisenring), 225.

<sup>49</sup> May 29, 1929 War Department, Office of QG, Report from L.H. Bash, Col. QMC, Assistant – ARHO to be filed file.

<sup>50</sup> Drawing 2.3-3/80163, September 9, 1929 – ARHO files.

<sup>51</sup> December 18, 1929 – Brig. Gen. Gen. L. H. Bash to Quartermaster Supply Officer, “Restoration of Arlington Mansion”– Record Group No. 92, Box 66, No. 600.3.

<sup>52</sup> The drawings are marked 855/80182 through 855/80193.

<sup>53</sup> March 12, 1930 – Correspondence from L. H. Bash, Brigadier General, QMC, Assistant, to Quartermaster Supply Officer, Washington General Depot – ARHO files.

<sup>54</sup> March 31, 1930 – QR (Quarterly Report) – “Remodeling of mansion and outbuildings in progress.” RG 92/Entry 1891/ Office of QG Geographic File 1922-1935/Box 69/File 600.912 – ARHO file.

<sup>55</sup> April 9, 1930 – Correspondence from L.H. Bash, Brig. General, QMC, Assistant to the QMSC, Washington General Depot – ARHO file.

<sup>56</sup> April 18, 1930 – Correspondences to Lt. Col. Chas. C. Mortimer to Col. P. W. Guincy.

<sup>57</sup> Quarterly Reports June 30, 1930 and September 30, 1930 – RG 92/Entry 1891/ Office of QG Geographic File 1922-1935/Box 69/File 600.912 – ARHO file.

<sup>58</sup> October 29, 1930 - Correspondence from Everett Chase to Lt.-Col. Chas. G. Mortimer – ARHO files. This exchange was presented in an earlier portion of this document where the original appearance of the exterior was discussed.

<sup>59</sup> November 10, 1930 – Report of Progress – Restoration Lee Mansion – Arlington Cemetery - Record Group No. 92 – Office of the Quartermaster General, Entry 1891, Office of the Quartermaster General Geographical



File, 1922-1935, Box No. 6, File No. 600.3 – ARHO files.

<sup>60</sup> December 31, 1930 and June 30, 1931, Quarterly Reports – ARHO files.

<sup>61</sup> See photograph by Christilf Studios, Baltimore, circa 1930; shows the original oven in the Baltimore house. In the photograph, the oven is to the left of the fireplace, an arrangement that was reversed in the Arlington summer kitchen – ARHO files.

<sup>62</sup> September 29, 1933 – Correspondence from Mortimer to the Quartermaster General, War Department. Snell, 1983, 10 – ARHO files.

<sup>63</sup> October 1933 – Specifications for Painting the Arlington Mansion, Slave Quarters, and Well House in the Arlington National Cemetery, Fort Myer, Virginia.

<sup>64</sup> November 15, 1933 - Correspondence from Elbert Cox, Assist. Historian, DOI to Mr. Chatelain – ARHO files.

<sup>65</sup> Survey No. VA-443, Arlington House, Arlington County, Virginia.

<sup>66</sup> March 6, 1944 Correspondence from Assist. Supt. Frank T. Gartside to Gillen – C.W. Snell, 63 – ARHO files.

<sup>67</sup> Aug. 28, 1957 – Regular Weekly Inspection Report No. 1 – Mr. Quinn and Mr. Roberts (Mr. Schwartz was absent) – ARHO files.

<sup>68</sup> September 25, 1957 – Report No. 2 – ARHO files.

<sup>69</sup> Rehabilitation of North Out-Building, Custis-Lee Mansion, Log, East Room Basement July 6, 1964.

<sup>70</sup> All information referred to as coming from the “log” is based on: Rehabilitation of North Out-Building, Custis-Lee Mansion – Construction log.

<sup>71</sup> By the description provided in the log, the distance between these ghost lines and the joist pockets along the east and west walls can not be accurately ascertained. The photographs taken by Mr. Roberts, as well as any plaster samples, are not part of the current Arlington archival holdings.

## Part IC

*Physical Description/*

*Conditional Assessment*

---



(top) South elevation.  
(center left) North elevation.  
(bottom left) East elevation.  
(bottom, right) West elevation, 2004.





## General Condition

Since the 1960s rehabilitation of the two dependencies, the National Park Service has maintained the structures, despite budgetary constraints. The systems, including mechanical and electrical, do need to be updated. Other than hot water baseboard heat, the buildings have no other plumbing. The roof requires and receives regular attention because of the continuing failure of the clay tiles; recent repairs are of a much better quality than earlier efforts to seal or reattach broken tiles.

Excessive moisture within the walls has been a long-standing problem, undoubtedly faced even in the nineteenth century. A holistic approach to improving drainage and ventilation and reducing moisture penetration is beyond the scope of daily maintenance. It is a problem that should be addressed in the immediate future before any effort to repair the stucco and plaster finishes.

The regular painting of exterior woodwork has helped minimize decay. However, various wooden elements that have been replaced over time, especially during the 1960s rehabilitation, tend to lack traditional detailing, such as drip edges on window sills. They constitute higher maintenance items. In a number of cases, replacement elements are contributing to the moisture problems.

In anticipation of the planned restoration of the building, the park has deferred some routine maintenance such as repairing ill-fitting sash, fixing loose hardware, and addressing some stucco failure in various areas. As long as these conditions do not contribute to moisture or safety problems, it is not anticipated that the buildings will suffer in the immediate future. Care should be taken, however, to address any immediate maintenance needs involving pre-Civil War building fabric, especially woodwork.

Regular roof, gutter, and drain maintenance should continue to be a priority. Wiring should be inspected and repairs made as needed.

## Site

The Arlington House, the Robert E. Lee Memorial site, includes a centrally-located yard, enclosed by the main house on the east, a dependency on the south and another on the north. An opening on the west side of the rectangular space provides access to Sheridan Road, which descends the hillside to the lower portions of the cemetery north and east of Arlington House (Figure 1). A circular bed, filled with a horizontally branching deodar cedar and a large boxwood, marks the center of the yard. The ground plane, outside the planting bed, is covered with river gravel, clay and sand mixture (bankum).

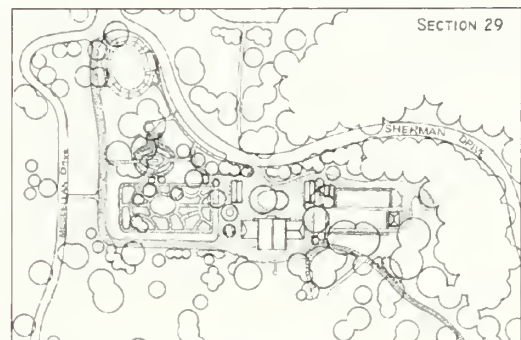


Figure 1. Schematic drawing of site.

The yard side (south) of the North Dependency is bankum and slopes from east to west. The area adjacent to the east and north facades of the building is covered with soil, ground cover, small bushes, and trees. The ground slopes in an east to west direction on the north and has been heavily disturbed over the years. Besides a large masonry rest-

room facility immediately to the north, a portable, accessible rest-room is currently located in the northeast corner. On the west side a gravel road (bankum) runs immediately adjacent to the building (Figure 2).

Deficiencies: Vegetation is overgrown on the east and north elevations and is contributing to the building's moisture problems (Figure 3). Exacerbating this problem, water ponds in various locations around the building as a result of heavy rains. This condition is particularly problematic on the west elevation where vehicular traffic splashes water onto the masonry wall. The restroom facilities to the north of the building may also be contributing to the moist soil condition.



Figure 2. Road along west elevation where vehicular traffic splashes water onto the masonry wall and damages historic masonry and finishes.



Figure 3. Vegetation on east elevation contributing to the buildings moisture problem.

Recommendations: Nonhistoric vegetation on the north and east elevations should be removed or trimmed as needed. The grade around the building should be contoured to effectively drain run-off away from the building. The roadway on the west side of the building should be relocated away from the building. Drains should be examined to ascertain their condition and effectiveness. Where necessary, they should be repaired, relocated, or supplemented. The planned removal of the restroom facilities and regrading should help in improving the moisture condition in that area.

### **Structure - masonry**

The North Dependency is a masonry structure with four exterior and two interior load-bearing walls. It is primarily brick, 8"-9" thick (two wythes), surmounting an 18" thick rubble stone foundation. The foundation walls are pointed with a brushed joint, flush with the outside surface of the stone. A lower protruding stone edge, 5'-6" below the top of the water table, spans the lower portion of the north wall just above grade. The brick portions of the walls have a painted stucco finish.



## Stone

Stones on the exterior face of the foundation walls vary in size but are coursed with a distinctive horizontal pattern. Exterior walls contain a variety of mortars, including mortar original to the wall, from the two restoration campaigns (the Quartermaster General's Office (QMC) in 1929 and the National Park Service in 1964), and from more contemporary maintenance efforts. These four mortars range from an early soft, warm-toned mortar with high lime content to more contemporary hard, gray mortars with high Portland cement content. Although sound, the walls in areas continue to act as a sponge absorbing water. On the outside, the ledge where the foundation meets the rough cast stucco above has no detailing; joints are exposed allowing water to collect and seep into the wall.

Finish analysis identified early paint coatings on the stone foundation on the north elevation, at the northwest end and on the south elevation (Figure 4). This treatment may have been applied in the years immediately following construction, concurrent with the exterior painted brick on the upper walls. Due to the fragmentary nature of the paint, a detail analysis may not be conclusive as to its date of origin. By the 1850s, the stone foundation was exposed. A drawing by Lee's daughter and early photographs from 1864 through c.1900 show the stone coursing and a distinctive variation of color from stone to stone. However, at some point in the early twentieth century, photographs show a parged coating of lime/cement mixture, giving the lower walls a smooth, more regular appearance. During the QMC restoration, the parging was removed.



Figure 4. Numerous areas of paint on the stone foundation may be evidence of an early coatings treatment.

Interior foundation walls have extensive areas of original mortar. This soft clay mortar has distinctive flecks of unburnt lime. In localized areas, the mortar has become friable, especially at or below grade. Mortar along the interior foundation of the west wall has significant deterioration. Otherwise, the mortar is generally sound.

Inner portions of the stone foundation and brick wall corresponding to the recessed arch on the north elevation have been rebuilt sometime in the past, but this is noticeable only on the interior in an area not visible to the public.

**Deficiencies:** The west wall has suffered noticeable surface erosion to the stone and deterioration to the exposed mortar joints. This appears to be the result of vehicular splash of rainwater that collects on the road immediately adjacent to the wall. This is a condition that needs to be corrected.

**Recommendations:** The exposed foundation ledge should receive a beveled edge of mortar to properly divert water away from the wall. Deteriorated and inappropriately tooled joints should be raked by hand and a more appropriate mortar reapplied. Care should be taken to properly tuckpoint the joints as needed, creating a flat-tooled, smooth joint with a 1/8" recess. In conjunction with the exploration of the drainage problems around the building, it is suggested that at the southeast corner of the wall,



a small trench be opened to examine the condition of the footings. The utility road by the west wall should be relocated away from the building.

### *Brick*

Early records reveal that the bricks used to construct many of the buildings at Arlington were made on site. Many are under-fired and some only air-dried, making them soft, porous, and sponge-like when wet. The brick portions of the North Dependency walls were laid with no distinct coursing and with varying joint widths, suggesting that the brick was not intended to remain exposed.

The exterior brick within the recessed niches on the north, west, and east elevations was initially only covered with paint, providing a more formal appearance than bare brick (Figure 5). Several coatings are still evident on the historic brick beneath surviving sections of the first stucco application. These coatings show evidence of being exposed to the weather for some time when viewed under a microscope. The base coat, a glossy white oil paint, is covered by a gold yellow distemper, which is covered with a mottled coat of medium rose.

**Deficiencies:** The brick walls are in generally good condition. Some repointing is needed although not widespread. There are some cracks in the masonry, principally on the north wall, which need to be monitored for movement over time.

**Recommendations:** No work or intervention is required other than selective repointing and monitoring of cracks along the north wall.



Figure 5: Paint on brick gave the building a more finished appearance in the early years before stucco had been applied to certain wall sections.



Figure 6: improper installation of flashing.

### **Masonry - brick chimney (exterior portion)**

Two brick chimneys, rebuilt in the 1960s, are extant on the building. They are a combination of older soft bricks and new sewer bricks with smooth finish; at the top, the flue is infilled with cement and sealed with a copper cap. Tar has been used to seal the flashing to the masonry and the cement-tile roof.

**Deficiencies:** Tar seals have failed allowing water to infiltrate; flashing has not been properly installed (Figure 6).

**Recommendations:** Regularly inspect the chimney and correct any potential leakage. Remove tar and reseal metal flashing with solder as necessary. Since the chimneys are not appropriate reproductions, they will be rebuilt as part of the restoration program. It is impor-

tant to reopen the flue on both chimneys to facilitate natural ventilation in the building. Although not authentic, it is recommended that chimney caps on a raised frame be installed to allow air movement below while protecting from direct rain infiltration and pests.

### Roofing structure

With the exception of the 1960s era reinforcement, much of the current roof framing in the North Dependency dates to the 1880s. Counterbalanced rafters and ceiling joists with 1"x 6" chords and ties at alternating rafters, formed the early 12/5 pitch roof structure. Drawings show that in the 1960s intermediate joists and ties were added to form a truss system. *See Appendix B: Historic Drawings.* Original eave outriggers were formed from continuous ceiling joists that cantilevered past the bearing walls. A number of original joists and outriggers survive, the majority above the west room. In general, the roof structure appears to be in good condition without perceptible leakage or structural distress.

Recommendations: Dependant upon interpretation plan.

### Roofing

According to insurance records, the North Dependency roof was covered with wood shingles in 1859 and Civil War photographs confirm this. Maintenance documents from the Quartermaster General's Office report that in the 1880s the roof structure was reinforced and the roofing changed to slate. The roof is currently covered with solid wood planking and an underlayment of 15# felt paper (double thickness in some areas), topped with clay shingles – Ludowici model 126 fired clay tile shingles; dating sometime around the National Park Service restoration of 1964. The tile dimensions are 9/16" to 5/8" thick, 15" to 15 1/4" long and 5 1/4" to 8 1/4" wide with a general exposure of 6 1/4". The

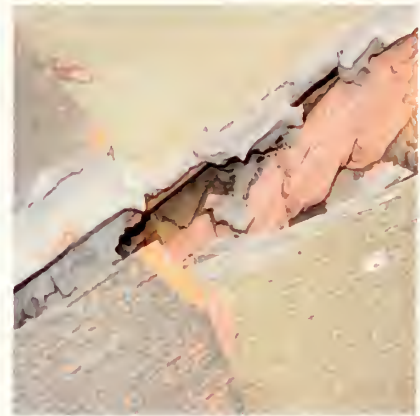


Figure 7: Delamination, chipping, crazing, and structural failure of tile shingles

tiles vary in colors ranging from dark gray to reddish brown and are visible on the roof. A "Boston" cap, using the same Ludowici tiles, covers the ridge. Past repairs include: tar applied to fill gaps between separating ridge tiles, copper sleeves and aluminum slipped under broken and/or missing shingles, and caulk/tar applied to join broken pieces.

Deficiencies: Delamination, chipping, crazing, and structural failure of tile shingles is widespread



(Figure 6); approximately 1/3 exhibit delamination. Fallen branches from a tree on the north elevation have contributed to the failure. Five to ten percent are cracked, with some retaining vegetation. By trapping moisture and preventing the roof from adequately breathing, felt roofing paper may be adversely affecting the wood sheathing beneath. Premature failure can be seen in the delamination.

**Recommendations:** Remove the clay tile roofing. Add wood nailing strips on top of existing sheathing to allow for appropriate ventilation. In the early nineteenth century, wood shingles were typically applied over skip lath with strips measuring from 1 1/8" x 2 1/4", fastened to each rafter they crossed with a cut or handmade nail. A high quality short lap wood shingle measuring 5" to 6" wide in a length varying from 18" to 20" should be used. The shingle butts wood shingles should be about 1/2" thick. The exposure of the shingles should be 5 1/2" to 6" on the south exposure while the north slope could be from 5" to 5 1/2". Install copper flashing under capping shingles at ridge. A comb at the roof ridge should extend from the north slope out over the south slope as much as 4"-6" (*see Appendix G*). Solder flashing rather than caulk should be used at the chimneys.

**Note:** The treatment of the underside of the roof is dependent in part upon the restoration plan and whether the underside will be visible to the viewing public.

### **Eaves**

The eaves on the North Dependency are tongue and groove board, painted white. A roof leak on the northwest corner has caused paint failure and wood rot (Figure 8).



Figure 8: Paint failure and wood rot at NW corner of the eave.

**Recommendations:** The existing eave detail where the boards meet in a seam at the edge of the roof is not typical for pre-Civil War construction. Moreover, it is a bad detail that allows water to wick inward causing wood rot. The eave boards should be removed and reinstalled correctly; cleaned and painted. A replacement board should be installed after the roof leak has been addressed.

### **Gutters and Downspouts:**

Five inch copper half-round gutters with copper hangers and straps (spaced about 2' apart) are currently hung along the north and south eaves. One box drop downspout serves the west corners of both the north and south elevations, feeding into a below ground drain which runs along the west side of the building. Six straps are missing from the south side and five are missing from the north. The gutters are in good condition.

**Deficiencies:** Evidence of significant splashback is visible along the lower wall surface suggests that the existing gutters do not adequately handle heavy rain. Due to the continued moisture problems within the walls, this condition remains problematic.

**Recommendations:** Despite the fact that gutters were not installed on the building in the mid nineteenth century, the severity of moisture problems provides a strong case for their continued use. If gutters are to remain, the 5" half-round troughs should be replaced with 6" members, and a second downspout added both to the north and south elevations on the east side. Both the new downspout



and a replacement downspout for the southwest corner should be round drops rather than box drops. The downspouts should remain connected to the underground drain. The underground drain loops should be relocated further away from the building foundation, especially considering that they may periodically become clogged with debris unless regularly maintained.

### Exterior wall finishes

The exterior walls above the exposed stone water table of the North Dependency are finished with two different stucco textures. The primary surface is rough cast, consisting of a thick topcoat of rendering combined with graded stone aggregate fillers applied over unpainted brick. The recessed ornamented niches on the east, north, and west elevations are finished in a skim-coat stucco with a relatively smooth finish, also described as “cork float” finish. The bricks beneath contain layers of color wash.

Microscopic investigation of the exterior has identified sections of an original rough cast stucco finish as well as later repairs. See *Appendix E: Field Notes, Section I*. An easy transition between the patches of the original rough cast and smooth stucco points to an early application in some areas on the east elevation as well.

#### *Stucco - smooth*

Numerous patches of smooth stucco of varying mixes have been applied over the years to the recessed niches (Figure 9). Three different applications have been identified thus far. The earliest smooth stucco is a two-layer soft render of pure white binder above a yellow base coat and small pieces of lime (shells) and tiny stones. Coatings include a white oil base under a gold yellow distemper topped by a layer of medium rose with a mottle of terra cotta. This mix is primarily found in more protected areas. See *Appendix F: Field Notes, Section I*. The QMC’s 1930 stucco is a Portland cement mix with small aggregate. It is hard and grey and found primarily in areas along the west and north elevations. See *Appendix E: Field Notes, Section I*. In 1964, the National Park Service used a beige restoration stucco similar to the earliest mix but with less aggregate. They topped their applications with a lime paint, similar in color to the older material.

**Deficiencies:** Sections of the smooth stucco have delaminated from the columns and wall surrounds on both the north and west elevations.

**Recommendations:** The stucco should be sounded for areas of delamination and dead sections should be removed. Since areas of pre-Civil War stucco remain, repairs should be made only as needed.



Figure 9: Layers of smooth stucco finish.



Figure 10: Interior corner.

Inappropriate stucco patches should also be removed. A somewhat plastic patching mix should be used, one with a white mason's mortar.

Significant cracks can be sealed by cutting the joints out and floating in repairs with a cork float using the same patching mix described above. This is especially recommended in areas of historic stucco.

Interior corners as found within the niches (Figure 10), should be repaired using a dovetail joint and *Plaster Weld*, diluted with 50% water to allow for better bonding. Flat areas of stucco with solid bonding to the underlying brick can be skim coated as needed. Work should only be undertaken by a plaster or stucco conservator.

#### *Stucco - rough cast*

The primary finish on the exterior of the North Dependency is a rough cast stucco, characterized by a thick matrix with exposed stone aggregate (Figure 11). Typically rough cast was applied by throwing it at the wall. Often it covered weaker materials. Its open-textured surface, with exposed aggregates, does not shrink much by comparison with smooth renders.



Figure 11. Rough cast finish, closeup showing a render of the aggregate mixed into the matrix.

Numerous mixes of rough cast have been applied to the building over the years. Four specific applications have been identified. The oldest coating appears to be original and applied directly to uncoated bricks. This coating is highly significant and is a rare early example to have survived in this country. This two-layered matrix is composed of a pure white binder of lime above a brown base coat with coarse stone aggregate. It is coated first with a glossy, white oil base paint below a layer of golden yellow distemper and topped with a coating of medium rose distemper. Significant portions of this older material is still found in the more protected areas of the building. See *Appendix E: Field Notes, Section 1*. The QMC's stucco has a darker brown render with medium sized aggregate. Areas of golden yellow and medium rose distemper paint have been randomly applied in an effort to blend the newer coating with the older. Many of these patches have darkened with airborne hydrocarbon particles (e.g. the window infill on the east elevation). Patches with this material correspond with alterations the QMC is known to have made during their restoration. See *Appendix E: Field Notes, Section 1*. The National Park Service used a restoration mix to match the older coat. This render is now a bit darker than the earlier mix, a medium brown, with medium-sized aggregate. These are seen on the south elevation extending up from the stone water table and around the door opening. Some National Park Service repair work was also undertaken on this elevation along the bottom of the fascia board. See *Appendix H: Field Notes, Section 1*. Some more contemporary repairs have also been made with a mix using gray Portland cement.

**Deficiencies:** The various surface repairs point to ongoing problem of rising damp and backsplash from heavy rains.

**Recommendations:** The rough cast should be sounded for delamination followed by the removal of all dead patches as well as those containing Portland cement; reapply rough cast using a mix that



matches the historic material, coat with lime, and paint to blend. Efforts should be made to preserve as much of the older coating as possible. A conservator should be involved in an effort to preserve in place as much of the original stucco as possible as this is a very rare early feature in American architecture.

Where stucco abuts horizontal wood trim or features such as window heads, copper flashing should be set up beneath rough cast finish and angled to lay flat on these wood elements. This will provide a more permanent weather seal and protection for the wood. A couple inches of finish will need to be removed and reapplied when the “bridge flashing” is inserted. The exposed edges of the copper should be coated to protect it from weathering. Where historic stucco remains in good condition and adjacent wood does not exhibit decay, retain existing condition and do not add flashing.

Should it be necessary to clean the stucco surface of the building in the future, it is recommended that a study of available techniques be performed at that time, and a materials conservator consulted to determine the gentlest means possible. Because of the moisture problems and taking into consideration the historic stucco that has survived, cyclical cleaning is not recommended.

### Openings

There are currently 14 openings in the North Dependency: three door openings spaced across the south facade; five window openings span the upper wall of the north elevation; and one attic vent opening is extant in each of the gable ends, east and west.



Figure 12. Left-windows opening into the east room (ND5 and ND6); center-window opening into center room (ND9); right-windows opening into the west room (ND10 and ND 11).

### *Windows (north elevation only)*

Five window openings currently span the upper wall of the north elevation (Figure 12), numbered ND5 through ND11 moving from east to west. The two 6-light wood sash, two single lights with air conditioning inserted, and one fixed light are hinged to upper window jambs by metal L-shaped strap hinges reproduced by the QMC in 1930 and were designed to open inward. The window openings that were examined in the east and center rooms (ND5, ND6, and ND9) are original to the construction of the building. The wood lintel above the east window in the east room (ND7) is a round log, cut in half lengthwise and is original to the construction of the building. The lintel above the west window in the east room (ND6), consists of two square-edged pieces of wood, laid parallel across the top of the window opening. The one closest to the inside of the room is old but not original as it



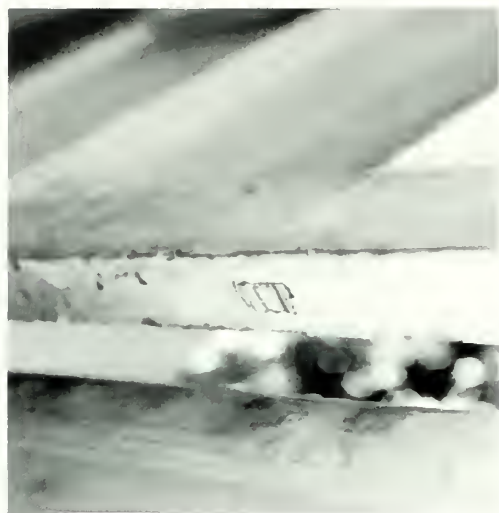


Figure 13. Vertical wood muntins with through tenon mortised into bottom rail of sash.



Figure 14. Profile, stool and apron.

accessible toilet. The window unit on the west of the east room has six divided lights. The L shaped reproduction strap hinges were installed by the QMC in the 1930s. The glazing is inconsistent in texture and color from light to light suggesting repair and replacement at varied times. The sash are ill fitting due to paint buildup but the joints are sound. The fixed sash in the western-most opening in the east room was fabricated in recent years to accommodate the portable window cooling unit. The frame and sash in the center room predates the 1930 restoration. Based upon a preliminary investigation, it may be pre-Civil War in origin (Figure 13 and 14).

The original wood lintels for the lower sash are extant, enclosed within the north wall. They measure 5' long and are arched along the upper edge (Figure 15).



Figure 15. Original lintel of lower opening on east

**Deficiencies:** The extant window jambs and sash are generally in good condition. The relationship of the window frames to the rough east on the exterior vary from window to window. A slight overlap of the stucco over the wood frame is appropriate. Most if not all the sills have been altered or replaced. New ones lack a drip edge.

**Recommendations:** All existing window frames should be removed, marked, and stored in the Park's collection. The rough cast should be removed around the opening and reapplied with a slight overlap on the wood frame. All window sills need drip edges. With the possible exception of the center room window, the current sash and frame construction is too light for the 1850s. New six-light sash for the upper-level with top butt hinges to project inward, should be milled. Jambs should be constructed of cypress and sills of walnut. The four lower-level window openings should be re-opened and filled with a six-over-three hung window with a fixed upper sash and an operable lower sash appropriate for the 1860 time period. See *Appendix F: Supplemental Drawings*.



Figure 16. Attic vent, west.



Figure 17. Attic vent, east.

### *Attic vent openings*

Two Pre-Civil War openings vent the gable ends of the attic, one on the east and one on the west. Both openings are supported by spanning wood lintels. The opening on the east is rectilinear and infilled with a tri-partite decorative wood grill, closed in the mid section and open on the two end sections (Figure 16). The center section of the grill has five balusters backed by a painted board. The flanking sections are slatted with painted wood louvers. The opening on the west is arched and also infilled with a tri-partite decorative wood grill, closed in the mid section and open on the two ends (Figure 17). As on the east, the center section of the grill has five balusters backed by a painted board. The closed center section coincides with the location of the c1860 fireplace flue.

**Deficiencies:** The attic vents are generally in good condition and need minor repairs.

**Recommendations:** Clean, scrape and paint as needed to ensure weather tightness.

### *Door openings, doors and door hardware*

Three six-panel, wood doors, similar to those seen in the 1860s photograph, were constructed and installed in the North Dependency by the National Park Service. Drawings for the door assembly are included in the 1960s set of construction drawings in the appendix of this report. These doors and frames are extant in the exterior-door openings on the south elevation. The doors are painted white. The center panels of the door opening into the west room are glazed. The center and west doors are hinged on the left. The door opening into east room is hinged on the right.

The door hardware includes metal knobs, escutcheons, dead bolt locks, and a lock box (interior mount on door to east room). All three doors are hinged with twentieth century butt hinges.

**Recommendations:** The hardware on the doors needs to be tightened and resecured as soon as possible (Figure 18). As part of a restoration



Figure 18. Door hardware needs to be tightened.



plan, all three doors and frames will be replaced. Photographs taken in the 1860s show three wood, six-panel doors with a narrow bottom rail in these locations (*see Part IB, page 9*). The original east and center doors were hinged on the right side of the door frame, the west door is not clearly visible in the photograph. Location of the historic ships ladder to the upper floor would indicate that the door is left hinged. The existing 1960s doors should be replaced with wood doors to match those in the 1860s photographs. The doors should be reset in the masonry opening at correct threshold height, 3" above current placement. The unusual door frame molding in the Uncle Joe photograph (*see Part IB, page 11*) should be cut to match the east room entrance, including unusual mitre cuts at bottom.

### **Wood trim**

Wood trim on the North Dependency includes outriggers/modillions, frieze boards, bed molding, door hoods, skirt boards, column capitals, vents, and spindles. Both the QMC and the National Park Service replaced some wood members during their restoration campaigns. A repeating pattern of edge treatments is apparent on the two gable ends of the building—bead/chamfer/bead/chamfer. Pieces listed below by elevation are in need of repair or replacement due to deterioration and/or improper detailing.

#### *west elevation*

Wood trim on the west elevation includes outriggers/modillions, frieze boards, bed molding, skirt boards, column capitals, vents, and balusters. The horizontal frieze boards running just below the



Figure 19. West elevation, fascia board is deteriorated.



Figure 20. West elevation, ponding water on horizontal trim surface.

attic vent, skirt boards, balusters, and vent elements date to the period of significance and should be retained. The modillions, fascia boards, and upper frieze are appropriate in form but are replacement pieces added after the period of significance. All pieces are coated with white paint. (*See Appendix E: Field Notes, Section 2.*)

**Deficiencies:** The fascia board, replaced by the National Park Service in the 1960s, is deteriorated (Figure 19). Depressions on the flat, horizontal trim surfaces directly below the attic vent within the rectilinear niche allow water to pool precipitating deterioration (Figure 20). All eave modillions on this elevation are replacements from the 1960s when the number was increased from 5 to 8. None are structural in function.





Figure 21. East elevation, horizontal frieze boards running just below the attic vent, balusters and vent elements date to the period of significance.



Figure 22. East elevation, vegetation provides a high moisture environment for the wood trim.



Figure 23. South elevation, pediment over east door.

#### *east elevation*

Wood trim on the east elevation includes outriggers, frieze boards, bed molding, skirt boards, column capitals, vents, and spindles. The horizontal frieze boards running just below the attic vent, balusters and vent elements date to the period of significance and should be retained (Figure 21). The modillions, fascia boards, skirtboards, and upper frieze are appropriate in form but are replacement pieces added after the period of significance. All pieces are coated with white paint.

**Deficiencies:** The attic vents are in need of cleaning and maintenance. The fascia board, replaced by the National Park Service in the 1960s, is deteriorated.

All eave modillions on this elevation are replacements from the 1960s when the number was increased from 5 to 8. None are structural in function. Although most surfaces are sealed with paint, the vegetation is thick against the building and provides a high moisture environment (Figure 22). Appropriate landscape measures should be undertaken.

#### *south elevation*

Wood trim on the south elevation includes outriggers/modillions, frieze boards, and bed molding. All pieces are coated with white paint. Three wood entry doors are evenly spaced across the facade and raised slightly above grade. They are surmounted by a door hood pediment of built up moldings dating to the 1960s NPS restoration and enframed painted panels. The location of the pediment (set within the rough cast and with rough cast between hood and door, Figure 23) appears questionable, but no historic documentation provides an alternative. Civil War era photographs are not of sufficient clarity to confirm or discount the NPS treatment of these features. See *Appendix E: Field Notes, Section 2*. The molding profile seen in the wood frame surrounding the painted panels is different than any other used on building and thought to date to the period of significance. The frieze boards and most modillions are from the early 1800s.

#### *north elevation*

Wood trim on the north elevation includes outriggers/modillions, frieze boards, bed molding, skirt boards, column capitals, vents, and spindles. The modillions and frieze board date from the period of significance. Many wood elements in the niche (e.g., the column capitals, upper skirt board) appear to have been reused from other locations/structures. Early paint layers including a purple layer were identified in the paint stratification.



Figure 24. North elevation, many wood elements in the niche (e.g. the column capitals, upper skirt board) were reused from other locations. Early paint layers including a layer of purple were identified in the paint stratification.



Figure 25. North elevation skirtboard replaced in the 1960s, does not match the original profile as found on the South Dependency.

**Deficiencies:** The fascia board, replaced by the National Park Service in the 1960s, is deteriorated. All pieces are painted white. Evidence of a moisture leak is seen on the eave near the east end. The skirt board within the center niche is a replacement and does not match the profile and construction of the original (Figure 25). The corresponding skirt board on the South Dependency provides an appropriate model for reproduction.

**Recommendation:** Replace the deteriorated fascia board. Repair the roof leak in northeast corner. Replace skirt boards on north and east elevations with wood that matches originals. To repair depressed areas of the horizontal skirtboards to encourage drainage and prevent further ponding, first strip the surface, drill random holes, and fill the area with epoxy. Then float one or two layers of epoxy with a 3 degree outward incline and paint.

## **Interior**

### *east room, current floor*

The interior space of the east room measures 17'-6" x 17'-8" with a ceiling height of 12'-5". The ceiling and all walls were plastered and painted white by the National Park Service in 1964. A 4'-3" high masonry shoulder projects 1' into the room along the north and south walls, serving as a structural support for floor joists when an earlier floor was located at that level (Figure 26). Until the investigative work began, it was covered with layers of 1960s plaster, capped with a painted 1"x 8" wood sill (white). Two 3'-4" x 3'-4" window openings are extant on the north wall (Figure 27 shows window on west with exposed lintel). An 18" square chimney chase, finished in white painted plaster, was constructed by the National Park Service in the 1960s along the east wall—it rests on the floating floor and is not connected to the remaining 1929 fireplace structure below (Figure 28).

The "floating" floor system, installed by the Park Service in the 1960s, consists of fourteen 4"x 12" joists set 32" o.c., running from east to west with 2"x 4" cross bridging running the center line of the room. The bottom of the floor joists are 4'-3" above the brick floor of the crawl space and are supported by four steel posts set on concrete pads. To minimize damage to historic fabric, the floor was held back 4" from all walls. A subfloor of plywood rested beneath the 1 1/2" thick floor boards, first used by the QMC as a floor for the cook's room and then recycled for this floor. A rectangular wooden hatch 2'-6" x 2'-4" opened into the crawl space located in the southwest corner of the room.





Figure 26. Shoulder served as structural support for floor.



Figure 27. Replacement window.



Figure 28. 1960s chimney chase.

The center of the hatch was covered with a metal grill to allow for ventilation below. This hatch and portions of the floor boards were removed as part of the recent investigation.

Areas of the 1960s plaster have been removed to expose the earlier surfaces below as a part of the recent physical investigation. Until recently the space was used as a dressing room for site interpreters and as a first aid station. It is currently unoccupied.

Recommendations: The current plans are to use this space for interpretation. The room should be periodically vacuumed to remove plaster dust until then.

#### *east room, crawl space - summer kitchen*

The interior space of the east room crawl space measures 17'-6" x 17'-8" with a ceiling height of 3'-4". The masonry walls are largely exposed due to the removal of plaster during the 1960s NPS restoration and delamination of early areas. The oldest mortar on the west wall is a clay sediment mortar with bits of unburnt lime. The door opening created by the QMC on the south wall has been infilled with brick.

There are various areas of earlier plaster along the west and south walls. Some areas date to the 1929 QMC restoration, but limited areas along the west wall are much older, possibly original. When the QMC undertook their restoration, they stripped the walls of QMC nineteenth century plaster but kept original material and added patches of Portland-based plaster where needed. It is therefore likely that since this earlier plaster is original; its survival owed in part to closure of the lower half of the cellar when the room was converted to a single story space. The early plaster is friable because of its



Figure 29. West wall of crawl space.



below-grade location and lack of ventilation in the space. Portions of the 1929-era plaster are sound, other areas have delaminated. The ceiling for this space is formed by the unfinished, underside of the floating floor.

The reconstruction of the 1929 QMC fireplace projects 30" inward from the east wall and has a 6' opening that was infilled with cement block in 1960 (Figure 29). The fireplace has been cut off just below the ceiling level. Elements of the design used by the QMC for the fireplace, oven, etc. on the east wall of the summer kitchen remain. An electrical junction box is mounted to the cement block infill. There is evidence of a key brick just to the north of the 1929 fireplace. This is probably part of the original fireplace that was removed by the QMC when they raised the floor level and converted the room to a single story space. The keyed brick is approximately 5'-4" to the right (south) of the northeast corner.

An 18" deep stone hearth, installed by the QMC in 1929, extends along the east wall of the space. The rest of the floor surface is brick, laid in a common bond pattern over a 6" deep sand base. Concrete footings, 2'-6" x 2'-6" x 1', in the four corners of the room upon which the steel posts that support the floating floor above are set.

Deficiencies: Some areas of the earlier plaster are dead. This is particularly the case along the west wall where much of the earlier finish has deteriorated and delaminated from the masonry wall. Mortar dust is collecting at the base of each wall, an indication of moisture movement, wicking up through the foundation, and breaking down the calcium in the mortar. Efflorescence can be seen on the east wall between the north wall and the fireplace. Small rodents are undermining the sand base of the brick floor. Crickets, mice, and snakes are past or present occupants. Ventilation was deficient but improved when portions of the flooring above were removed.

Recommendations: Water management and ventilation issues should be addressed first by routinely opening windows, preventing splashback and improving drainage on the east and north elevations. Where possible, areas with early plaster should be consolidated by applying a bonding agent such as a *Plasterweld* mixture of 1 part resinous emulsion to 1 part water. The surface should first be carefully cleaned with air from a no-pressure air hose. Then apply *Plasterweld* with a soft brush. If NPS decides to conserve areas of the early plaster, a perforated frame can be mounted to the masonry wall around the plaster and an acrylic glass sheet attached to the frame. The installation should allow for air flow between the plaster face and the glass.

Deteriorated mortar joints should be raked back to where they are sound (1/2" - 1") and repointed with a new appropriate mix.

Recent archaeological findings point to the existence of a brick floor within an inch or so of the current floor level at the time the sill was laid. This is consistent with previous findings of the archaeological investigation. With that in mind, a brick floor would be an appropriate surface if this space is to be restored and interpreted. The existing fireplace from the QMC restoration should be removed and further investigation undertaken in the area to determine more about the cooking fireplace and to rule out the use of a stove in this space c.1860. Pest management should be routinely undertaken.

*center room*

The center room measures 18'-6" x 10'-4 1/2" with a ceiling height of 12'-3". The ceiling and four walls are smooth finish plaster. A 4'-3" high masonry shoulder projects 1' into the room along the south, east, and west walls (Figure 30). The shoulder is covered with layers of 1960s plaster, capped with a painted 1"x 8" wood sill. One 3'-4" x 3'-4" window opening is extant on the north wall. It contains an inward projecting sash with six divided lights, hinged at the top with L-shaped strap hinges reproduced by the QMC in the 1930s.

The "floating" floor system, installed by the National Park Service in 1964, consists of eight 4"x 12" joists set 32" o.c., running from north to south with 2"x 4" cross bridging running the center line of the room. The bottom of the floor joists are 4'-3" above the brick floor of the crawl space (at grade) and are supported by four steel posts set on concrete pads. In order to minimize damage to historic fabric, the floating floor was held back 4" from all four walls. A subfloor of plywood rests below the 1 1/2" thick floor boards reused from the QMC restoration. Pieces of 12" square floor tile, once providing a finished surface, are scattered around the room. The wooden hatch which opens into the crawl space measures 2'-6"x 2'-4" and is located in the southeast corner of the room. The center of the hatch is covered with a metal grill to allow for ventilation into the space below.



Figure 30. North wall, west end of the center room showing exposed masonry and window hung with the Army's L strap hinges.



Figure 31. South west corner wall, west end in the center room showing high masonry shoulder.

Original interior door openings on the west and east walls were infilled by the National Park Service; current investigators have partially reopened them, exposing the expanded metal lath and concrete block infill. Shallow joist pockets dating from the 1929 QMC restoration are exposed on the east wall.

**Deficiencies:** Other than the plaster removal from various wall areas during the HSR investigation, there are no major deficiencies. The space is currently used for storage by the concessionaire.

Recommendations: The ultimate treatment plan calls for restoring this space to its original appearance.

*center room, crawl space*

The interior of the center room crawl space measures 18'-6" x 10'-4 1/2" with a ceiling height of 4'-3". The masonry walls have a noticeable horizontal coursing. Small bits of plaster or whitewash finish remain on isolated stones along both the east and west walls. Stone remnants of the intermediary east-west wall (rebuilt by the QMC to support the vestibule portion and removed by the NPS in 1964) contain early mortar and protrudes beyond the plane of the east wall. The floor in this space is dirt.

The north wall shows signs of considerable past disturbance (Figure 32). The right (east) two thirds of the wall has been rebuilt mostly in brick, even below grade (inner wythe), and pointed with a soft white mortar distinct from the original lime flecked clay sediment mortar. The mortar also does not

match the mortar known to have been used by the QMC during its 1929 restoration. It is possible that it constitutes an area that was repaired independent of the restoration work. This repointed area covers the eastern 6' of the wall from approximately 1' above the current floor level to an area about 4' above the current floor level, where it joins a second disturbed area. Composed of three brick courses, this second area, 3'-8" west of the east wall and between 4' above the floor, appears to have been rebuilt using older bricks and a newer



Figure 32. The north wall of crawl space in center room.

mortar. Visual inspection suggests that this area dates to the 1964 NPS restoration. These disturbed areas correspond to the niche on the exterior north elevation. Because it is recessed, this area has a thinner wall than the rest of the structure. The brick upper portion of the north wall appears undisturbed with original mortar in the joints. Most areas are covered with whitewash.

Deficiencies: unknown.

Recommendations: All three cellar spaces, including that of the center room require better air circulation. A 4-6 mil polyethylene vapor retarder should cover the floor.

*west room*

The interior space of the west room measures 18'-6" x 14'-6" with a ceiling height of 12'-3". The ceiling and four walls are whitewashed gypsum board (Figure 33). NPS drawings show the same



floating floor system as installed in the east room in the 1960s, consisting of twelve 4"x 12" joists set 32" o.c., running from east to west with 2"x 4" cross bridging running the center line of the room. The bottom of the floor joists are 4'-3" above the brick floor of the crawl space (at grade) and are supported by four steel posts set into concrete pads. Floor boards, 1 1/2" thick, originally used by the QMC, were reused to surface this floor above the plywood subfloor. A commercial floor tile has been applied to the wood planked surface. The wood hatch opening into the crawl space is 2'-6" x 2'-4" and is located in the southeast corner of the room. The center of the door is covered with a metal grill to allow for ventilation into the crawl space when the door is closed. The physical investigation of this space has been precluded by the fitout of the concessionaire.



Figure 33. West room with book store concessionaire.

Deficiencies: unknown.

Recommendations: The thorough physical investigation should be undertaken to determine the condition of the walls, ceiling and floor before a work program is undertaken.

#### *west room, crawl space*

The interior space of the west room measures 18'-6" x 14'-6" with a ceiling height of 4'-3". The ma-



Figure 34. South wall, crawl space below west room.

sonry walls in the cellar have a noticeably horizontal stone coursing. The original finish was probably plaster with whitewash. Small bits of plaster or whitewash finish remain on isolated stones along both the east and west walls (Figure 34).

Deficiencies: Mortar joints on the west wall are deteriorated due to splash and ponding along roadway adjacent to the building.

Recommendations: A thorough physical investigation should be completed to determine the condition of the walls, ceiling, and floor before a work program is undertaken. The west wall should be carefully monitored until repointed.

### **Mechanicals**

Heat is supplied by a hot water baseboard piping in each of the three principle rooms. Hot water is supplied from the heating plant beneath the adjacent restroom facility. New service should be considered as part of the overall plan to upgrade service to Arlington House.

Electrical: The main panel box or the North Dependency is located in the center room of the comfort station below the adjacent restroom. A subpanel is located in the North Dependency. New panel box and service are needed.

Lighting: There is minimum lighting in the east and center rooms. Lighting needs should be established to reflect the proposed restoration plan.

Water: There is no separate water service. None is required for the restoration plan unless needed for fire suppression system.

Fire and intruder alarm: Fire detector information is forthcoming. There is no intruder alarm system. New fire and intruder alarm should be installed.



## Part IIA

### *Ultimate Treatment and Use*

---

---





## **Overview of Ultimate Treatment Plan**

Restoration of the North Dependency according to the Ultimate Treatment Plan will enable the National Park Service to more comprehensively interpret the daily life and history of Arlington's domestic slaves. It will also enable the Park to present and interpret a most distinctive and rare interior plan for a dependency on an estate in the antebellum South. This treatment plan is based upon the information presented in Part IB Chronology and Development of Use. It marks the third time in the last eighty years that efforts have been made to understand and interpret the historic function and appearance of the Arlington slave quarters. But it is the first time that evidence is sufficient to conclusively establish the interior circulation plan and the building's exterior appearance during the period of significance.

Both the QMC restoration in the 1920s and the National Park Service work in the 1960s involved archival research, interviews, and physical investigation of the buildings, with much of the same documentary information at hand. Yet their interpretations and resulting treatments varied considerably. The U. S. Army, being closest to the 1850-1860 time period and being the first restoration program, had the most material (documentary, witness' recollections, and physical) to work with. We now know that their restoration efforts were not as inaccurate as was long believed by the National Park Service. However, the 1920s work was flawed in several important respects. The QMC overlooked the fact that they were dealing with a very atypical building. As a result, their solution as to how the upper and lower rooms in the North Dependency were entered was simply incorrect and perhaps influenced by a desire to identify a practical solution to the problems of circulation and configuration.

Less than thirty years later, the National Park Service undertook to fix what it saw as a misguided restoration effort. Correctly asserting that the QMC's interpretation of the south elevation was inaccurate, they proceeded to dismiss virtually all of the other features of the U. S. Army's work. The original NPS plan disregarded as many clear facts, such as the existence of a two-level interior as did the QMC restoration. As soon as the NPS restoration was underway, it abruptly came to an end. The Park had received additional archival information and uncovered physical clues that contradicted the intended plan. As a result, the National Park Service closed the space to the public and converted the use to storage and other utilitarian functions. It is to the credit of the NPS team that rather than attempt a second restoration that they knew would be erroneous, they essentially mothballed the space until a better understanding of its historic use and configuration could be reached.

The current effort to restore the North Dependency at Arlington builds on the information, evidence, and complicated history of these two previous restoration efforts. It adds fresh insights into the building's historic configuration based on new readings of the photographs and papers that have long been a part of the archival record. Of particular significance, the current physical evidence of remaining paint, plaster, wood nailing blocks, and other clues of the past have enabled the investigating team to solve the physical layout and circulation pattern of the building. The current project team also acknowledges that interpretation is an ongoing, continual process. Historians, architects, conservators, engineers, and park officials will continue to shed additional light on how the building once looked, how it was used, and how those who once called it home, lived. With this in mind, the current plan calls for as much preservation of historic material as possible; the clear demarcation of

as much new material as possible; and in general, specifies the gentlest means necessary to achieve the Park's objectives.

The Ultimate Treatment Plan proposes restoring the exterior of the North Dependency and restoring much of the interior to reflect its appearance in the 1860s. Work required to return the exterior of the building to its 1860s appearance is fairly straightforward: reopening window openings on the north elevation, replacing some inaccurate trim pieces, conserving historic stucco and repairing deteriorated sections, rebuilding the three entrance doors, repairing and repointing the masonry foundation, and replacing the deteriorated and non-historic roof.

On the interior, the plan proposes restoring the historic and very significant split-level arrangement in the east room with a summer kitchen below and living quarters above. If the plan is enacted, a new wood floor resting on the original north and south wall shoulders will divide the upper from the lower-level. The restoration of the summer kitchen should include rebuilding a new fireplace and chimney in the center of the east wall as well as reinstalling two windows on the north wall. The lower-level should be reached through the current doorway on the south elevation and down a stair to be installed on the inside rather than on the exterior as the QMC interpreted the space in the 1920s. A wood ceiling bulkhead (matching that seen over the shoulder of Uncle Joe in his 1860s-era photograph) should be located at the entrance landing on the south elevation. The upper-level should be reached through the historic entrance way on the east wall of the center room.

The center room should also be restored to its 1860s appearance. A wood plank floor should be installed at its historic level. An intermediary vestibule on the south end of the room will enclose doorways and "ships ladders" to the upper-level, east and west rooms. Separated by a partition and door, the rear section of the room should be restored as a living space. To provide space for the concessionaire, interpretation, and other park functions, the west room would not be restored but rather rehabilitated for continued use as a single story space with the floor at-grade. Walls in this non-restored space should be finished with either smooth plaster or gypsum board.

## **Exterior**

### *Walls, Finish, and Trim*

The North Dependency's exterior displays a relatively high degree of integrity featuring significant areas of historic finishes and materials. Civil War-era photographs by Andrew Russell show that the North Dependency exterior in the 1860s had a rough cast stucco finish on the main portions of the walls that matches the current appearance. Portions of the east and west walls visible in the photographs had a smooth stucco finish accentuating recessed areas in the center of the walls, flanked by engaged columns also covered with smooth stucco.

Recent physical investigation and paint stratigraphy analysis confirmed that most of the rough cast finish (excepting primarily the lower half of the south elevation), along with much of the woodwork, dates to the period of significance. Foundation stones, with the exception of those immediately adjacent to the south elevation door openings and the infilled lower windows on the north elevation, are original to the building. The Ultimate Treatment Plan calls for the retention and conservation of surviving historic material and finishes. Areas of delaminated, deteriorated, or inappropriately patched rough cast and smooth stucco should be replaced with new material that replicates adjacent areas. The foundation should be repointed using a soft lime mortar with a flat-tooled smooth joint.



The outriggers along the western side of the building, some wood trim members, most of the exposed masonry foundation stones, areas of smooth stucco on the west and north walls, and areas of the rough cast stucco, date to the 1860s period. Other elements, including most of the remaining outriggers and much of the trim date to the twentieth century, but because they accurately replicate historic material, should likewise be retained. These elements are identified in the drawings in *Appendix F*.

### *Roof and Chimney*

A limited number of roof joists (primarily above the west room) are original to the North Dependency. The remaining joists and rafters are a combination of 1880s and 1960s material. The plank sheathing dates to the 1880s. Because the present roof framing system does not accurately reflect the historic configuration, and because the restoration plan calls for an open ceiling in the center room and in the upper-level east room, the 1880s and 1960s material, should be removed and a new restoration structural system installed. Using the dimensions and appearance of the existing joists, new joists measuring approximately 3" to 4" by 4" to 6 1/2" with both vertical saw and hand hewn markings should be installed in place of the 1880s joists (approximately 4' o.c.). New rafters, based on surviving original rafters above the west room of the South Dependency, should be installed at 2' intervals. Rows of skip lath supporting the new wood shingles should be secured to the restoration rafters. An alternative to this treatment of the roof structural system is described below.

The 1960s clay tile roof has reached the end of its service life, as evidenced by the large number of failed tiles. This roof should be removed along with roofing felt and any deteriorated sheathing beneath. The restored roof, then, should feature new straight butt sawn wood shingles in a traditional overlap pattern with a 5"-6" exposure. Shingles should be nailed to sleepers set on the a replaced roof framing system. See *Appendix F: Supplemental Drawings* section for additional information about the roof.

The North Dependency did not have gutters until 1906. However, in an effort to mitigate the well-documented moisture problems this building has experienced over its history, the existing gutters (dating to the 1960s) should be replaced with new, larger capacity gutters and an additional round downspout. This will increase drainage during wet weather, reducing splashback and the amount of water penetrating the ground immediately adjacent to the structure.

The Ultimate Treatment Plan calls for rebuilding the current chimneys above the roof line (dating to the 1964 NPS restoration) to more closely match their historic appearance. Rebuilt chimneys should be part of the chimney and fireplace reconstruction previously discussed. Work should include installation of copper flashing between the chimney and roof to provide a secure, durable, and weather-tight fit. The new chimneys should be opened to facilitate air circulation in the rooms below.

### *Alternative Plan - Roof Structural System*

Although the most of the current roof framing consists of replacement pieces dating to the nineteenth century and 1964, and because they appear structurally sound, an alternative roof treatment to the one described above would include concealing rather than replacing the existing system. In the upper room, the underside of the single remaining ceiling joist accessible for investigation, gives no indication that the ceiling was originally finished. The simplest way to conceal the altered roof system would be to finish the ceiling with plaster. A second alternative would be to install floorboards above,

leaving the joists exposed. A third alternative is to paint a trompe l'oeil depiction of the appropriate roofing configuration over a finished ceiling. A fourth alternative is to attach to the underside of the roof sheathing, wood shingles in a pattern that suggests the underside of the original roof. (This treatment is proposed for the center room of the South Dependency.) A final alternative is to remove the later roof system and install a reconstructed frame to match the original timbers.

When work on the roof takes place, every effort should be taken to insure that the rooms below are protected from rain. Due to the historic stucco, similar efforts are needed to preclude additional moisture from seeping into the walls during the roof work.

### *Doors*

The three doors currently located on the south elevation date to the 1960s NPS restoration. The exterior faces of the center and east room doors bear a general resemblance to those shown in the 1860s photographs. The door to the west room (bookstore) has glass panels in place of wood. Inaccuracies in the rail, stile, and panel configuration, combined with generally poor condition, call for replacement doors with units that more closely match the historic doors. Using photo perspective studies the treatment of the east room opening seen in the Uncle Joe and other Civil War photos can be replicated with a high degree of accuracy. See *Appendix F: Supplemental Drawings* for details relating to the east room door. The moldings, including the back bands with mitred bottoms and the beaded applied architrave, should be reproduced along with the six panel door. Appropriate reproduction cast iron hinges should be used.

As discussed in Part IB, elements of the center door opening visible in the 1860s era photos are different from those on the east door opening. It is clear that though the doors are very similar, the back bands on the center room are carried down to the sill (rather than mitred) and that the joint between the vertical members and the sill also varies from that on the east opening.

Photographic evidence regarding the historic appearance of the east door and frame is fairly conclusive, but can only be used with certainty in restoring that opening. There are no other historic images of the doors and only one (an 1864 Andrew Russell photograph) shows another door frame (for the center room). As a result, the ultimate treatment should include using the North Dependency center room frame (as seen in the 1864 photograph) as the basis for the remaining five openings on both dependencies, while the door to the east room (as seen in the 1864 Civil War photograph and the Uncle Joe photograph) should be the basis for all six dependency doors. Each replacement door should match the original raised panel door's dimensions and materials as shown in *Appendix F: Supplemental Drawings*.

Hardware should include early sheet iron box locks. They should feature either stock locks (as are visible in the Uncle Joe photograph) or box locks with knob sets. Hinges should be 4" narrow butts, cast iron, five knuckle butt hinges with four screws per leaf. Hardware should be secured with straight-slot flat-head wood screws set flush or sunk slightly below the surface of the butt hinges. Locks on all the dependency doors (though perhaps uncommon on slave quarters) is not entirely out of keeping with the building's historic appearance, especially as one is visible in the Uncle Joe photograph. The other doors were quite possibly salvaged from other locations, with or without locks. (Note that at least two of the doors in the South Dependency would have had locks). Doors with locks also provide a measure of security necessary today.

### *Door Cornices*

Though their details are difficult to distinguish, cornices above the doors are seen in Andrew Russell's 1864 photographs. Photographs from around 1900 show the cornices as flat panels framed with molding. During their 1930 restoration, the QMC raised all three door openings into the area once occupied by the cornices before infilling the east and west doors. They did not install a new cornice above the repositioned center door. The existing projecting cornices with copper caps date to the 1960s National Park Service work. Installed with pebble dash stucco between them and the doors, these features are not in keeping with typical historic door or window cornices that featured a flat architrave between the opening and the projecting cornice moldings. The Ultimate Treatment Plan calls for removing the 1960s cornices and producing new door hoods of a simplified design, placed approximately 3" above the door frame. The proposed design of these hoods noted in *Appendix F: Supplemental Drawings*, should be modified if a future physical investigation of the wall areas behind the 1960s cornices provides additional information about its dimensions or other characteristics of the original door hoods.

### *Painted Panels*

George Washington Parke Custis reportedly painted the framed stucco panels above the south elevation doors. They were severely deteriorated when the QMC decided to restore them in 1929-1930. A progress note in the QMC files indicated that in November 1930, all the other work on the restoration had been completed with the exception of restoring the paintings above the doors "as no artist has been secured for this work." Photographs in the 1930s and 1940s show the panels as blank areas of stucco, indicating that the work was never completed (unlike the panels on the South Dependency that appear to have been restored in 1931). At present, the panels are still blank stucco. It is unknown whether any remnants of Custis's paintings survive beneath these panels or whether the historic material was removed prior to recovering. The Treatment Plan recommends consultation with a qualified paint conservator, to identify potential areas of original finish and provide a treatment plan. The painted panels should be restored, if present, or replicated.

### *Windows*

All windows are currently located along the upper half of the north elevation. The window corresponding to the center room and the west window in the east room are the only openings on the North Dependency with intact sash. The Ultimate Treatment Plan recommends removing the surviving sash, marking and storing the material in the park collections, and fabricating new restoration sash. See *Appendix F: Supplemental Drawings* for detailed drawings of proposed restoration sash. On the exterior, the relationship of the existing east and west room window frames to the rough cast finish should be corrected. The frames should be flush with the finish; the sides of the sills should be embedded in the rough cast.

The historic lower-level windows below the existing pairs of windows on the east and west sides of the north elevation should be reopened. New frames and sash matching those in *Appendix F: Supplemental Drawings* in dimensions and appearance should be fabricated and hung using reproduction hardware appropriate to the period.



## **Exterior Treatment Summary**

- Remove existing 1880s and 1960s era roof structural system including all non-original joists. Replace with joists and rafters based on dimensions of surviving members above North and South Dependencies. Protect walls and room interiors from weather during roof work.
- Replace existing 1960s clay tile roof with new wood shingle roof to match the 1860s appearance
- Rebuild the east and west chimney above the roof as described in *Appendix F: Supplemental Drawings*.
- Replace gutters with 6" half round gutters and install additional round drop downspouts on both sides of the east end of the roof to help address moisture problems
- Remove only deteriorated, delaminated, and inappropriately patched smooth stucco and rough east stucco finish on each elevation. Replace with new material that matches nearest historic material in appearance and composition. Adopt a strict conservation plan for the surviving historic stucco that ensures the preservation of as much historic finish as possible
- Existing window sash should be removed and stored in park collection; new restoration sash fabricated for all five upper window openings
- Replace strap hinge hardware with reproduction hardware appropriate to period; reestablish drip function of sill
- Reinsert lower-level windows on north elevation according to drawings in *Appendix F: Supplemental Drawings*
- Replace inappropriate plank watertable on east elevation with two piece molded to match that on west elevation
- Replace deteriorated fascia board and other trim as shown in drawing in *Appendix F: Supplemental Drawings*
- Restore grade on north elevation after removal of restrooms
- Relocate service road away from the west elevation of the building, and restore landscape and grade

## **Interior East Room**

The Ultimate Treatment Plan includes the restoration of the east room as a two-story space with a summer kitchen below and an upper-level living space. As discussed in *Part IB: Chronology of Development and Use*, abundant physical and documentary evidence confirms that this configuration matches the interior layout during the 1860s. Within the photograph of Uncle Joe, taken sometime between 1862 and 1865, a bulkhead and rear lower-level window clearly reveal a split-level design. The vertical wall of the bulkhead which is shown separated the upper-level sleeping quarters from the entry landing to the lower summer kitchen from the upper-level and the kitchen itself. The door shown in the photograph swings to the right supporting the conclusion that a stairway or ladder would have turned to the left (west) along the south wall of the room. This circulation pattern is corroborated by the oral histories provided by the Gray sisters who, according to the QMC, recalled that "the steps to the kitchen come in from the outside, eat-a-corner, at the entrance nearest the house . . ." It would have been disfunctional to have had the stairs turn to the right (east). Since food was being brought up the stairs to be delivered to the main house, it would have been necessary to have had the door closed in order to cross over the landing before opening the door and exiting. The stairs along the west wall avoided this major problem. Furthermore, a stairs that descended straight down from the landing would have been contrary to oral history and also highly impractical as the stairs would have terminated in the center of the kitchen working area. The 1856 Benson

Lossing sketch and the Andrew Russell photographs taken a decade later indicate that the 1860s entrance was at grade. The Russell photographs also show that an interior partition divided the center room into a vestibule where stairs or a ladder would have provided access to a door to the east room upper-level. (This arrangement is further discussed in the center room section below.)

Physical evidence discovered during the QMC restoration, the NPS work in the 1950s and 60s, and the current investigation lends definitive weight to the interpretation of the east room as a two-story space with an upper-level reached through the center room. In 1929, the Army found a door opening on upper west wall of the east room leading from the former upper-level space to a stairway in the center room entrance vestibule. Though the NPS infilled the door opening in the 1960s, the current study again uncovered it to reveal that the masonry jambs and wood lintel were indeed of original construction. The QMC also uncovered infilled window openings in the east room's lower-level, and found evidence of the original lower floor level and hearth. During the recent physical investigation, the lower-level window openings were uncovered on the inside and were deemed original to the building's construction.

Through their investigation and the oral histories they gathered (from the Gray sisters and Jim Parks), the Army concluded that the space was once divided into two separate rooms. The QMC erred, however, in installing the stairway to the summer kitchen (and the corresponding room on the west end of the building) on the exterior and infilling the entrance at grade. The Civil War photographs showing doors at-grade clearly contradict this interpretation. It was only with the acquisition of the Uncle Joe photograph in the 1960s and with a computer based study of it during the current investigation, that a better understanding of the historic configuration was reached.

The recent physical investigations also raise certain other questions regarding the QMC restoration. There is no identified evidence that the summer kitchen oven built by the QMC in 1929 replaced similar original feature in the same location. Though the QMC stated that they identified the original fireplace hearth, they took the design for their restoration from an existing historic building in Baltimore. Removal of the 1929 fireplace and further field investigation should be undertaken.

#### *Fireplace and Chimney*

Broken key bricks, ghosts of the chimney edges (where surviving plaster abutted the removed chimney) and remnants of the plaster flue (see *Figure 17 in Part IB*) all indicate that the chimney was originally 6'-6" wide extending in mass up the height of the east wall. The Ultimate Treatment Plan calls for the reconstruction of this chimney and fireplace in the summer kitchen. Soot residue on the east wall bricks and the remains of the plaster flue lining does not clearly point to a firebox on the upper-level. Careful removal of the QMC restoration fireplace on the lower summer kitchen wall and removal of the 1964 NPS chimney will allow further investigation of the historic summer kitchen fireplace and the possibility of a second firebox in upper-level room. (Drawings in *Appendix F* suggest a possible flue configuration for a firebox on the upper-level.)

#### *Floors and Ceilings*

Removal of the 1964 NPS era plaster has revealed evidence of the original upper-level floor position. Plaster lines (where the historic plaster ends on both the upper edge of the summer kitchen wall and the lower edge of the upper-level wall) and baseboard nailing blocks indicate that during the period

of significance, the floor was approximately 10'-7/8" above the historic floor (approximately the same as the current brick floor level in the summer kitchen) and that the summer kitchen ceiling was at approximately 9'-3 7/8". See *Appendix H: Period and Restoration Drawings* for additional information about the proposed treatment for the east room.

Floor joists along with sleeper members that framed the chimney and entrance bulkhead should be reinstalled at their original positions resting on the north and south wall shoulders. These members were concealed beneath the upper-level floor boards above and the summer kitchen plaster ceiling below. As a result, the replacement framing can use any engineered system that can support the required load while fitting within the dimensions of the historic floor/ceiling assembly. Replacement floorboards for the upper-level should be 8"-9" random width tongue-and-groove planks of unfinished heart pine approximately 1" to 1 1/8" thick. The most appropriate timber currently available for replacement boards is water salvaged wood. The summer kitchen ceiling should have a traditional plaster finish. The upper-level ceiling should be unfinished revealing the restoration rafters and joists of the roof's structural system.

The summer kitchen floor should be brick at approximately the same position it is located at present.

#### *Bulkhead, Landing, and Stairs*

An entryway platform or landing immediately inside the door on the south wall should be constructed along with stairs that descend along the south and west walls to the summer kitchen.

#### *Walls*

Investigation of the interior revealed that the summer kitchen and the upper-level room had plaster finished walls during the period of significance. At present, the walls in the east room contain a modest amount of surviving historic plaster beneath later plaster. Where this plaster is intact and sound (along the north end of the east wall crawlspace to the north of the 1929 fireplace and below the current grade floor level) or in isolated areas where original finish plaster and paint layers survive (the east corner of the south elevation near the shoulder), it should be retained and consolidated. Park officials may consider affixing an acrylic glass cover, allowing for necessary ventilation, to protect the original material from abrasion. In all other areas, the 1964 gypsum plaster should be removed by hand. Extreme care should be taken to remove the remaining NPS plaster in as gentle a manner as possible so as to not damage any historic plaster or finish below. When the later layers are removed, all wall surfaces should be closely examined for surviving evidence (plaster and finish remnants, partition ghosts on the brick, and nailing blocks) that may provide additional historic information.

An original brick buttress along the west end of the north wall in the east room reinforced the recessed arch in the center of the north exterior wall. It was removed during the 1964 NPS work on the space. The Ultimate Treatment Plan recommends rebuilding and plastering this feature.

Areas of bare brick should be covered with a traditional plaster application thin enough to reveal some of the texture of the brick surface beneath. The recent physical investigation and finishes survey identified surviving remnants of the historic finishes in these spaces. The upper room appeared to have whitewash beneath a golden yellow distemper and a medium rose distemper as the uppermost layer, while the summer kitchen appears to have had a whitewash finish. See *Appendix F*.



### *Furnishing*

Interior of the summer kitchen and upper-level living space should be furnished with period reproductions of objects appropriate to such spaces in the 1860s. Furnishing plans should take into account the Gray sisters' 1929 oral histories where they recalled the presence of a big table in the center of the kitchen and additional tables on the side and against the wall. See *Part IB* for a discussion of the oral histories relating to the North Dependency interior spaces. Reproduction furnishings would allow less restricted visitor access and make unnecessary a new acquisition campaign like that undertaken by the QMC in the late 1920s. This would also broaden the permissible temperature fluctuation in the space and thus enhance the visitor experience by approximating historic seasonal temperature conditions in the interior.

### **East Room Treatment Summary**

- Remove by hand all 1964 gypsum plaster from wall surfaces, documenting any new discoveries of historic plaster, finishes, nailing blocks or other features
- Install floor joists, bulkhead and floorplanks to divide summer kitchen from upper-level according to drawings in *Appendix I: Period and Rehabilitation Drawings*.
- Install landing and stairway along south and west walls descending to summer kitchen floor level according to drawings in *Appendix I: Period and Rehabilitation Drawings*.
- Apply relatively rough lime plaster finish that matches period of significance finish uncovered during recent physical investigation to all exposed wall surfaces and to rebuilt summer kitchen ceiling
- Consolidate and preserve representative areas of original plaster and finish, consider protective measures such as vented acrylic glass covering
- Remove existing chimney and reconstruct historic chimney along east wall based on measurements obtained during physical investigation; install fireplace in summer kitchen
- Reconstruct original arch reinforcing buttress on north wall shoulder adjacent to west interior wall

### **Interior - Center Room**

The Ultimate Treatment Plan recommends restoring the center room to its 1860s appearance as a living space for Aunt Judy. This requires aligning the restored floor level to the baseboard nailing blocks on the south, west, and north foundation walls, applying a whitewash to the stone foundation walls, reinstalling a partition between the forward vestibule and rear living area, opening up doors in the vestibule area to the east and west room upper-levels and, where necessary, conserving historic plaster and replastering the walls as needed. Alternatively, the center room's floor level would remain in its current position near grade. While this treatment would be less accurate to the historical configuration, it would address potential accessibility concerns, without significantly altering the space.

Information about the function and appearance of this room in 1860 was provided by the Gray sisters and Jim Parks, as well as Civil War era photographs, and the recent physical investigation described in *Part IB: Chronology of Development and Use*. The evidence suggests that, with the exception of the floor position, the QMC was generally correct in its 1929 interpretation of this space.

### *Vestibule*

With no brick toothing to indicate that they were added after construction, and a wood lintel encased in original mortar on the east wall, the door openings on the east and west walls appear to be original. These openings provide supportive proof that the east and west rooms were divided into two levels, that the upper-levels did not need exterior entrances, and that the center room had a dual function of living space in the rear and vestibule/entryway in the forward (south) section. The Treatment Plan calls for opening up both doorways, carefully removing the 1964 cement block infill, and inspecting the original brick for any surviving indication of wood door framing or other historic characteristics. If evidence of historic wood jambs is not revealed, the opening to the upper-level east room should remain unfinished and no door installed. Because the Ultimate Treatment Plan calls for leaving the west room as a single level room with a floor at grade, the opening on the west wall should be treated differently. To illustrate the historic opening and indicate that the room beyond was similar in use and configuration to the east room upper-level, a trompe-l'oeil painting can be made on the surface of a recessed infill panel set within the historic opening. The trompe-l'oeil should show the view into that space and include a human figure turning the corner to the right of the opening with his back to the center room vestibule. See example used at Gunston Hall--*Appendix J*. A pair of wooden "ships ladders", based on those prepared for the South Dependency, should be fabricated to allow access from the vestibule floor level to the upper room door openings on the east and west walls.

The current remnants of the east/west partition wall in the center room crawlspace, because they protrude from the wall plane, indicate that the masonry wall probably was also an original feature of the space. This masonry wall did not align with the historic partition above. In the center room, vertical indentions in the original plaster, which has survived along the upper east and west walls indicate that the upper section of this wall (above the current floor level) was a thin, wood plank partition. The original wood partition was located a short distance from where the QMC had rebuilt theirs. The presence of the partial wall in the 1860s is confirmed by an 1864 photograph (*Figure 8, Part IB: Chronology of Development and Use*), which shows the western edge of the partition opening leading to the rear living quarters.

The Ultimate Treatment Plan calls for reconstruction of the vestibule partition wall above the restored floor level. The 1929 QMC vestibule wall had a lower masonry section built on top of the historic remnants of the original wall and ascending up to a line parallel with the upper edge of the east and west wall masonry shoulders. A plank partition, tied to the east and west walls continued up to a line parallel with the top of the south wall. The recent physical investigation, however, has not revealed any signs on the east and west walls that the original masonry partition extended above the floor level. It appears that the masonry portion of the vestibule wall only extended to just below the historic floor level, where it would have provided additional support for floor joists. The historic wood plank partition, therefore, probably ran the height of the space from the floor to the roof joists, the joists helping to provide support for the wall. To reflect the historic appearance of this partition, the reconstructed vestibule wall should be constructed of vertical planks with a plank door to the rear living space situated in the center. See *Appendix F* for proposed drawings of the reconstructed vestibule wall.

### *Floor Level and Ceiling*

The 1929 QMC restoration joists (placed along the upper portion of the masonry foundation wall to support the rear living space) are disputed by nailing blocks that indicate that the historic floor level

was consistent throughout the space and was close to the current floor position. Furthermore, the 1929 joist pockets excavated as part of the recent physical investigation appear to have been inserted into the wall surface, indicating that they were probably a later addition and not a feature of the original construction.

Because no historic joist pockets were located, the nailers located on the north, south, and west wall are the best evidence of the historic floor's location. Functioning as blocks to anchor baseboards to the wall surface, they indicate that the historic floor was located approximately at the same height as the historic threshold. See *Appendix I: Period and Rehabilitation Drawings*. Though some of the wood blocks may have been added during the post-Civil War period, these later blocks are interspersed along the same line as those conclusively dating to the period of significance.

The existing floating floor can be used to support the new restoration floor. Existing planks should be removed, the height of the floor adjusted to its historic position, and new floor boards installed (matching those used in the reconstructed cast room upper-level). New baseboards approximately 5" in height should be installed along all four walls.

The center room should not have a finished ceiling but be open to reveal the new restoration roof framing system as described in the Ultimate Treatment Plan for the exterior.

### *Walls*

The earlier nailing blocks along the south and north walls have remnants of a distemper wash that suggests that at least parts of the interior, possibly the baseboards alone, had a finish other than the whitewash found on the plaster and masonry wall surfaces. See *Appendix E, Section 3, Finishes Survey*.

In contrast to the cast room, significant areas of the center room walls bear what is probably original plaster. In the areas where physical investigation was undertaken, this thin layer of plaster was carefully uncovered and found to be intact, sound, and preservable. All 1960s gypsum plaster should be carefully removed from the walls and foundation revealing any surviving older layers beneath. Where possible, this original plaster should be retained. Delaminating areas should be consolidated; deteriorated areas cleared to a secure substrate and then patched in kind. To blend original plaster with patched areas, the entire wall should be painted with a thin whitewash.

During the physical investigation a whitewash finish or white paint was found behind later mortar patches, indicating that the paint predated the 1920s era restoration.<sup>1</sup> It was also found further back in the room below the area where the QMC painted in 1929 (below the QMC floor level). Before the Civil War, it would be consistent with other findings that the stone foundation probably had a white finish in both the vestibule and the rear living quarters. As a result, the wall should be repointed where necessary and a whitewash finish applied.

### *Furnishing*

Reproduction furnishings, similar to those used in the east room upper-level and west room upper- and lower-levels, should be placed in the center room living space.



### **Center Room Treatment Summary**

- Remove infill from historic door openings to east and west room upper-level living spaces.
- Paint trompe-l'oeil view into west room upper-level on recessed infill panel on west wall of vestibule. *See Appendix J.*
- Reconstruct vertical plank wall with door opening and plank door dividing space into forward entrance vestibule and rear living space in same position as historic wall.
- Install a reproduction "ships ladder" below each opening to provide access from vestibule floor level to east and west rooms.
- Install new plank floor and baseboards matching the historic floor position as identified by nailers uncovered during physical investigation.
- Carefully remove all remaining 1964 gypsum plaster from wall surfaces, documenting any new discoveries of original plaster, finishes, nailing blocks, or other historic features.
- Preserve or conserve historic plaster to the greatest extent possible.
- Remove deteriorated or delaminated areas of earlier plaster layers to nearest sound layer/area and patch these areas as well as areas of exposed brick with lime-based plaster.
- Cover new patches with lime-based whitewash to blend with historic finish; note scoring in select areas of original plaster finish can be duplicated when making repairs to these locations.

### **Interior - West Room**

During the twentieth century QMC and NPS restoration work, the west room of the North Dependency was considered less important and received less investigative attention (and less documentation) than the east room space containing the summer kitchen. During the recent physical investigation, the west room was almost entirely inaccessible having been occupied and in use as a bookstore. As a result of these factors, less is known about this space than the center or east room. It is not clear how much historic material survives beneath the bookstore's slatwall display paneling and 1964 plaster. Based on the information currently available, it is presumed that the west room was a mirror opposite of the east room, with the exception that the fireplace(s) would not have been the size of the kitchen but more similar to the fireplace in the west room of the South Dependency.

Unlike the center and the east rooms, the Ultimate Treatment Plan recommends not restoring the west room to the 1860s period. To provide continued space for the bookstore, or alternately interpretive displays and exhibits that may be installed in the future, this room should be rehabilitated as a single level with a floor retained in its current position. The existing wall covering (likely gypsum plaster dating to the 1960s NPS work) should be retained. At the upper and lower-level window openings on the north elevation, curtains or other means of recessed concealment should be installed so that the single level space can not be identified as such from the exterior. The existing tile floor is in poor condition and should be replaced with another hard-wearing floor surface placed at grade.

### **West Room Treatment Summary**

- Temporarily relocate existing bookstore, dispose of current display walls, shelving, tables; and substitute materials that are more appropriate to the space; and, if possible, leave the plaster walls exposed
- Install means of concealing newly reopened lower-level window openings on north elevation
- Remove existing tile floors, replace with appropriate new hard-wearing floor surface
- Install new shelving and displays for merchandise

- If possible, affix interpretive board to wall, describing original function, configuration, and occupants of rooms

### **Interior - West Room (Alternative Treatment)**

An Alternative Treatment for the North Dependency west room would include restoring it to its 1860s appearance based on information revealed during subsequent physical investigation. In such a treatment, the bookstore furnishings and 1964 floor should be removed. The 1964 plaster should be carefully removed and any ghostmarks, lines, nailing blocks, paint, or other historic evidence revealed during this process should be recorded and the information incorporated into this report. Particularly important are any signs of the upper-level floor and lower-level ceiling locations and finishes, the width and characteristics of the fireplace and chimney including indications of a firebox on the upper-level, the presence of a stairway along the south wall, wood blocks suggesting the presence of baseboards or chair rails, paint colors, and other indications of historic finish. Any resulting information can be used to modify the restoration plan and may be applicable to the work on the east room.

If additional information about the historic configuration of the west room is not revealed during the physical investigation, findings from the east room should be used to guide the restoration of this space, which should be divided into two levels. The upper-level floor should feature tongue and groove planks as in the east room, the lower-level ceiling should be finished. A landing and stair should be reconstructed inside the doorway and along the south wall.

Unless other information is uncovered, the lower-level floor should be positioned and finished in a manner consistent with the summer kitchen floor.

The historic lower-level windows should be opened, and sash and frames identical to those fabricated for the summer kitchen installed.

If substantial historic plaster survives in good condition, it can be left exposed. Other significant plaster areas can be consolidated. Where patching is necessary, a lime-based plaster should be applied.

### **West Room Alternative Treatment Summary**

- Remove bookstore furnishings and 1964 floor.
- Carefully remove by hand all 1964 era plaster from the walls, recording any discoveries in the process
- Barring additional information, reconstruct upper-level floor and lower-level ceiling, landing, stairs in south west corner and fireplace on west wall
- Reopen historic lower-level windows on north elevation and install frames and sash as in summer kitchen
- Consolidate historic plaster where necessary, remove areas that are significantly deteriorated and patch exposed brick with lime-based plaster
- Reconstruct fireplace in lower room based on physical evidence

## **End Notes**

<sup>1</sup> The mortar was located near the west side of the door on the south wall. It was white crumbly mortar that matched mortar on the east wall of the east room, covering the broken fireplace key bricks. This suggests that the mortar shortly postdates the Civil War and that in all likelihood the whitewash behind this mortar predates the Civil War.



## Part IIB

### *Requirements for Treatment*

---



## **Accessibility Issues Concerning Proposed Work to the Arlington House Dependencies**

From the initial planning for the North and South Dependencies, the Park sought opportunities to expand its interpretation of plantation life at Arlington and the experience of the African-American slaves of Robert E. Lee at his family residence. A precursory examination of records concerning the two dependencies suggested that considerable change had occurred over the years to these two structures and that little historic fabric probably remained. Assuming only the vestiges of the original structures survived, making the buildings fully accessible on the principal floors was not considered problematic.

As the research and physical investigation of the structures expanded, two surprising developments emerged. First, physical investigation and a more indepth study of available records and historical photographs presented a fascinating picture of two buildings that retained considerable historic integrity. The exterior of both buildings retained their original walls and fenestration, even taking into account the filled in window openings still evident on the lower-level, north elevation of the North Dependency. The most altered openings had been the entrance doors on the North Dependency which were changed during the military restoration but returned to their historic location during the National Park Service work in the 1960s. The exterior masonry walls were largely intact, dating to their pre-Civil War construction, and most remarkable, the majority of the prominent rough cast stucco on both dependencies dated at least to the 1850s. Not only is this a very early use of such a wall finish in the United States, unlike the Mansion's foundation where the original rough cast stucco finish was long since removed, the historic treatment on the dependencies, complete with evidence of early paint, had survived.

Second and significant in its own right in terms of American architecture, these findings were soon joined by an equally important development. Conclusive physical evidence was uncovered in the North Dependency confirming that the end rooms were two story spaces at the time of the Lee residency; for the first time there emerged an understanding of the unique manner in which access by the slaves was obtained to these spaces. Only now can we appreciate the uniqueness and importance of the Arlington plan for these plantation dependencies. Probably no where else do similar plantation buildings survive in the United States. While we will never know for certain why such an impractical floor and circulation plan was created, the separation of the summer kitchen from the slave quarters within the North Dependency was undoubtedly for control and security. Consider the large lock on the kitchen door that is prominent in the Uncle Joe photograph from 1864. Even Uncle George, the slave who worked as the family cook and lived above the kitchen, might not have had access to the kitchen 24 hours a day; certainly the rest of the slaves at Arlington would not.

As these discoveries were revealed through the architectural investigation, the challenge remained to come up with a plan that would provide public accessibility to as much of the planned restored spaces as possible.



*Plan A. Provide for public viewing of the upper rooms of either or both of the end rooms of the North Dependency.*

About one year into the investigation, a meeting was held with the Park staff to provide an update on the progress of the work. As a result of this meeting, two alternatives were to be investigated for public access to the upper-level of the end rooms of the North Dependency.

*Alternative 1.* Use the center room as access to the upper-levels by cutting new doors in the masonry toward the rear of the room, utilizing ramps or lifts along with stairs to accommodate the grade changes at the upper-level end rooms spaces. It was understood that the existing blocked openings near the front door were historic. Their significance and position made them impractical as a primary public entrance to the upper rooms, using the traditional center room entrance from the outside.

Further investigation into the center room removed sections of the 1960 cement plaster and revealed that much of the historic plaster on the brick side walls had survived and that both masonry-bearing partition walls were original. With ghost marks of the historic vestibule partitions and lighting fixtures along with graffiti, and finish treatment, this was an important discovery. Besides the ease to be made against cutting the historic masonry and wall finish to accommodate two new door openings at the rear of the room, a new circulation plan for the center room would overwhelm any attempt to convey to the public the unusual and distinctive nature of the original plan—ladders in the center room vestibule to ascend to sleeping quarters on the upper-level end rooms. Furthermore, under the proposed contemporary circulation plan, the interpretive value of the center room would be lost. Conversely, a restored center room would provide for the entrance vestibule and sleeping quarters behind the vestibule partition walls, all accessible for viewing with the creation of an at-grade entrance from the outside.

*Alternate 2* Utilize the west room as the primary circulation plan for the east room's upper-level. This concept emerged from the planning meeting with the Park as a way to avoid any additional removal of historic fabric yet provide access to the upper-level in the east room in a manner that was clearly contemporary.

Since the historic west room had a plan similar to the east room, this option would not restore the west room to a split-level but rather retain the current single-level and raise the grade on the outside to provide for at-grade public access. The interior of the west room would serve two functions: provide space for interpretative wall displays, and provide for a raised platform toward the back and right side. The raised platform would be at the same level as the threshold of the historic doorway to the vestibule of the center room, and ascended by steps – for accessibility, there would be a mechanical lift. A contemporary bridge across the center room's historic vestibule (to be reconstructed) to the east room historic doorway would provide access to the cook's quarters above the kitchen.

Upon further investigation, it was apparent that this alternative was also impractical. First the west room is significantly smaller than the east room. With the bookstore still residing in the west room, those in attendance at the Park planning meeting were visualizing a space more the size of the east room. Second, the historic doorway into the vestibule was located very close to the existing door to the west room, making an elevated walkway turning at this location very impractical. Third, the bridge across the vestibule of the center room would significantly reduce the interpretative oppor-

tunities that exist for the center room. And last, there is the realization that the public would have a hard time comprehending the historically significant original circulation plan that is of high interpretative and architectural value.

*Alternate 3 (recommended)* This alternative emerged after exploring both Alternative 1 and Alternative 2 and further investigation. Rather than providing public access for all, a combination of viewing opportunities could be provided.

The proposed recreated platform on the inside of the entrance to the east room would provide an opportunity for visitors to look up into portions of the upper floor room through contemporary viewing windows cut into the reconstructed planked bulkhead. By raising the exterior grade at the entrance to the east room, and with a minor increase in the platform size for accessibility purposes, the platform would provide an opportunity to view the sleeping quarters above. At the same time the historic circulation pattern could be restored and be evident to visitors. Additional visitor experience of the upper-level could be provided in the following ways:

1. Small groups accompanied by a Park guide or Park volunteer could occasionally have access to the upper room by using the ship's ladder in the center room.
2. Interpretive displays in the North Dependency west room or the South Dependency east room could provide additional visual information.
3. A prepared tour program (video or computerized) or a camera that could be remotely moved by visitors would provide an opportunity for a virtual tour of the upper-level space in the east room

This third alternative provides the greatest opportunity for public exposure, while permitting the restoration of the center and east rooms of the North Dependency which are significant to the story of the daily lives of African-Americans who comprised the household staff at Arlington.

*Plan B. Provide accessibility to the lower-level of the east room of the North Dependency.*

As the original two-level plan emerged from the field investigation, the difficulty of accessibility to the kitchen area became apparent. Initially, there was hope that evidence for a door leading out of the kitchen on the north elevation could be identified. There was one testimony from a field slave at Arlington indicating that such a door existed. However, other slave testimony countered this remembrance. The U. S. Army restoration had provided for a window in each of the historic openings at the kitchen level. While these openings had been filled in during the National Park Service work in the 1960s, inside the area below the disturbed window openings was intact from the original nineteenth century construction, providing the strongest evidence that no such door ever existed. Furthermore, recent archeological investigation at the northeast window provided no information to the contrary. Another telling story is that the unusual interior plan for the North Dependency and the three door entrances off the yard to each building almost surely were designed for plantation control—all coming and goings could be observed from the yard, out the back of the main house. While a door off the north elevation of the kitchen leading directly to the kitchen garden would be very practical, facilitating delivering of food, water and fuel for cooking, it would have provided for an entrance along a swale that would not be easily observed by the Custis-Lee family.

Having established with reasonable certainty that no such door existed historically, consideration was made of the advantages and disadvantages of creating a contemporary door opening in lieu of one of the historic window openings. It would provide an accessible entrance and permit better general circulation within this space. Besides the removal of historic fabric in lowering a window opening to create a new door, the fact is that the historic floor grade in the kitchen is well below the existing exterior grade. Even if the historic grade is recreated (as recommended in the Historic Structures Report), the kitchen floor would still be below grade. To provide for accessibility, a cut in the earth would be needed to create the necessary slope for an accessible entrance to the kitchen, presenting some risk to the original foundation that would require further intervention. The length of the sloping entrance would be over twenty feet, running parallel to the building from west to east. While making the kitchen accessible and increasing the circulation for groups and tours, the consequences are quite significant as noted in the list below:

1. The ramped entrance would provide for a major architectural feature on the north elevation of the North Dependency. With the planned removal of the existing public rest-rooms, the north elevation will once again be quite visible from the kitchen garden, the potting shed, and the current paved road up through the park and cemetery. The north elevation was articulated and designed to be seen; it was not a secondary elevation. The new pathways, the railing along the ramped entrance, and the sheer size of the entrance as experienced by the public would be both jarring and confusing in terms of understanding the historic plan of the building.
2. One of the important components of the story of the domestic slave experience would be diminished in terms of public understanding. The hardships imposed by the historic plan of the building meant that the every day lives of the staff was made significantly more difficult. All delivery of food to the Mansion from the kitchen meant that narrow winding stairs had to be used up to the landing and at the south door to the yard, rather than out a rear door that could have had a sloping path up to the Mansion. All fuel for cooking and water for cooking and cleaning had to be delivered using the same passage. Only two windows placed high in the wall provided natural light and ventilation to the kitchen, except when the front door was open.
3. A new rear door would be considered a significant change in the effort to restore the exterior of the building and to provide for an accurate representation of the distinctive interior plan. The public would not be experiencing the yard, Mansion and dependencies as Custis and Lee had intended. For the domestic staff, the yard was the focus for circulation and undoubtedly for daily activities routinely done outside the buildings, weather permitting.

### **Moisture Control**

Both the North and South Dependencies have long suffered from moisture problems. Even in the Civil War photographs, it is apparent that the buildings have long exhibited serious rising damp. Over the years, moisture rising in the walls has led to decay of interior and exterior finishes at varying heights on the walls starting at the ground and working up; the breakdown of mortar joints in the same areas of finish decay; and the deterioration of various wood members. While wood decay as a result of excessive moisture in the walls is not currently a major issue, problems with finishes and mortar joints remain high priority issues. Besides the normal reasons for undertaking moisture



control measures, the importance of preserving and maintaining the highly significant sections of the historic stucco can not be over emphasized.

To help ameliorate the moisture problems, a number of corrective steps should be taken:

1. A study should be made of the current drain system around the building to ascertain its effectiveness especially in times of heavy rain. Consideration should be made of moving drain openings further away from the building and appropriate steps taken so when drains are partially clogged or overwhelmed by heavy rain, ponding will not occur immediately in and around the building. Since the well is in close proximity to the east elevation, any potentially negative impact it may have on the building should also be considered.
2. The grade along the north elevation should be regraded once the restroom facility has been removed. The historic contour and slope should be re-established, making provisions to insure proper drainage away from the building.
3. Sometime over the past 50 years, the National Park Service applied a thick, very hard plaster to the interior wall surfaces on the current first floor level. This appears only on the stone walls within the current rooms and not on the brick wall surfaces. In the east room, it applied to the lower half of the party walls. In the center room it seems to serve primarily to even out the irregular wall surface. While serving the same purpose in the east room, the thick hard plaster on the south wall may also have been intended to provide a more permanent bonding finish where conditions of rising damp existed. The thick plaster finish should be removed, taking care to document and not damage any vestiges of historic finish that may remain underneath. In its place, a thin plaster finish, in keeping with the visual qualities of the historic finish, should be applied. Such a treatment should not be designed nor considered a permanent corrective solution. It is expected that flaking, cracking or other signs of gradual failure will continue to occur; such conditions should be accepted in order to best present to the public what the appearance and conditions of the building was in 1860. This was part of the living and working conditions of the life of household slaves at Arlington. Simply put, the interiors of this building were seasonally damp and unpleasant.
4. It is our understanding that the Park intends to run HVAC services to the building from a plant located away from the main house and that the room temperature will only be moderated in periods of extreme hot or cold temperature. Such an approach is important because any attempt to bring full climate control to the interior of the North Dependency may encourage rising damp within the walls. In the event a decision is made to utilize the west room for a gift shop or other purpose that requires greater comfort level, the impact of the HVAC usage should be monitored as regards to moisture in the walls.
5. Additional steps should be taken to improve air circulation in all three sections of the building. It is recommended that when the fireplace in the east room is reconstructed, the chimney/flue should be operable to promote better air circulation. A compatible chimney cap should be installed to keep out water and insects. If the west room fireplace is reconstructed, the chimney/flue should be operable as well. Reopening the two windows in the kitchen

should include provisions for their use to help ventilate the space as needed. The two windows in the former lower-room in the west section of the building should be re-established whether or not the upper- and lower-rooms are restored. If the current single level is maintained in the west room, the windows are still important to the accurate depiction of the exterior of the building. In the crawl space below the center room and below the current west room, there were early attempts by the National Park Service to provide for mechanical movement of air to help deal with the dampness problems. This equipment has not been used in recent years. As part of the planning for the new HVAC system, some mechanical movement of air in these spaces is desirable.

6. Areas of deteriorated mortar joints along the lower foundation walls should be repointed, matching the historic tooling and mortar. The west elevation will need more extensive repointing due to more widespread deterioration. Repointing along this wall will also include the interior side of the north wall in what was formerly the lower floor quarters. Repointing of interior walls will also be required in selective areas of the center room crawl space and in the east room, lower-level.
7. The beveled mortar edge along the water table should be correctly re-established.
8. Joints that occur between masonry and wooden elements should be caulked or flashed as appropriate.
9. The grade along the east and south walls should be monitored during periods of heavy or sustained rainfall to ascertain where water ponds or improperly drains.
10. Vehicular usage of the road along the west elevation not only presents an unnecessary risk of impact damage to the building but also creates a significant problem when passing vehicles splash standing water on the road onto the wall. As a result, much of the lower exterior wall needs repointing along with the interior wall. To avoid further erosion of the stone and damage to the wall, it is strongly recommended that the access road be relocated away from the west side of the building.
11. The size of the gutter should be increased from 5" to 6", and one additional downspout should be added on both the north and south elevations.
12. The stucco finish should be selectively repaired where needed, to help keep out unwanted water from penetrating the walls. Any finish paint should be compatible with existing paint and designed to be breathable.
13. In the crawl space of the center room and in the lower-level on the west room, a vapor diffusion barrier consisting of polyethylene had been installed over the dirt floor by the National Park Service. No longer functioning because of major deterioration, it should be replaced.

## **HVAC**

Decisions regarding any HVAC installation are beyond the scope of this report. It is our understand-

ing that a physical plant is being designed by others to supply the needs of both the Mansion and the North and South Dependencies. Based on our investigation, some special precautions are still worth noting:

1. Both the North and South Dependencies are quite special historic resources and for their age and historic function contain a considerable degree of historic integrity. Special care should be taken not to damage historic fabric or historic finishes.
2. Due to the long-term moisture problems associated with the dependencies, considerations regarding the treatment and operation of the HVAC should take into account the recommendations in this report concerning moisture management.

### **Security and Fire Protection**

Decisions regarding security and fire protection are beyond the scope of this report. It is our understanding that both the security system and the fire protection system are being designed by others as part of the larger planning project for the Mansion and are being designed as a central system.





## Part IIC

### *Bibliography*

---

**Investigative team site visits:**

Arlington House Archives (ARHO), Arlington House, VA  
Cultural Landscapes Office, National Capital Region, Washington, DC  
George Washington's Mount Vernon Estate and Gardens, Mount Vernon, VA  
George Washington Memorial Parkway Archives, GWMP Headquarters Turkey Run Park, VA  
Hampton National Historic Site, Towson, MD  
Library of Congress, Washington, DC  
National Archives, Military Records, College Park, MD  
Virginia Historical Society, Richmond, VA

**Documentation found and reviewed:**

**Primary sources—**

Civil War Matthew Brady photographs/ Andrew Russell photographs, June 1864  
Agnes Lee's journal  
Eleanor Calvert's reminiscences  
Markie Williams' journal  
*Architectural Forum*, March 1924  
1929 interviews with former slaves—Jim Parks and Gray girls  
1930 interview with former landscape gardener, David H. Rhodes  
Monthly reports of the Quartermaster General's Office, condition of the National Cemetery  
Copy of many letters and documents from behind the brown cupboard (ARHO)  
Drawings—Restoration of Arlington Mansion, Construction Service, Office of the Quartermaster General, 1929-1930  
Drawings—Arlington House, HABS, 1940  
Drawings—Rehabilitation of North Outbuilding, National Park Service, 1960

**Secondary sources—**

Arnest, H. Lee. "Historic Structures Report: Architectural Data Section, Phase I." (draft HSR, 1982, photocopy).

Arnest, H. Lee. "Historic Structures Report: Architectural Data Section, Phase I." (HSR, Denver Service Center, December 1985).

Arnest, Harry Lee and John D. Sligh. *Arlington House Historic Structures Report*. George Washington Memorial Parkway, Virginia. National Park Service, U. S. Department of the Interior. August 1985.

Arnest, Harry Lee and John D. Sligh. "Historic Structures Report: Architectural Data Section, Phase II." (HSR, Denver Service Center, November 1985).

Byrne, Karen. "Selina Gray." *Cultural Resource Magazine*. No. 4. 1998.

Copp, Barbara M. "Historic Preservation Guide, Arlington House, The Robert E. Lee Memorial." (first draft, August 9, 1996).

DeButts, Mary Custis Lee. *Growing Up in the 1850s: The Journal of Agnes Lee*. Chapel Hill: The University of Northern Carolina Press, 1984.



Fenton, Jerry F. "A Study of Slavery at Arlington Estate." (Senior Honors Thesis, Department of History, Harvard University, 1960).

Hanna, Jennifer. "Arlington House, The Robert E. Lee Memorial, Cultural Landscape Report, History, Volume 1." U. S. Department of Interior, National Park Service, 2001.

"Historic Structures Report: Historical Data for Grounds." (original typescript and illustrations, Office of Archeology and Historic Preservation, ea. 1970).

"Historic Structures Report, Volume II: Architectural Data Section. Arlington House." (draft HSR, Denver Service Center, September 1981).

"Historic Structures Report: Historical Data Section, Supplementary Material." (Denver Service Center, November 1985).

Lampl, Elizabeth Jo. "Guide to Arlington House Documents, 1933-1999." (draft, July 1999).

McCormick, Charles H. "Custis-Lee Mansion: Historical Data – Grounds." (Office of Archeology and Historic Preservation, June 1, 1968).

McCormick, Charles. "Historic Structures Report, Part I, Historical Data Section, Custis-Lee Mansion." (partial copy, Office of Archeology and Historic Preservation, September 1968).

McCormick, Charles H. "Historic Structures Report: Architectural Data Section, Phase I, Structural Data, Part I." (draft HSR, Denver Service Center, September 1979).

Mullins, Agnes D. "Historic Grounds Report, Part II." (photocopy, March 1964).

McDaniel, George W. *Hearth and Home, Preserving People's Culture*. Philadelphia: Temple University Press 1982.

Nelligan, Murray H., Ph.d., "Arlington House, The Story of the Robert E. Lee Memorial." Burke, Virginia: Chatelaine Press. 2001.

Nelligan, Murray. "*Old Arlington: The Story of the Lee Mansion*." (unpublished dissertation, Columbia University Ph.d., U. S. Department of Interior, National Park Service, 1950).

Nylander, Jahne C. *Our Own Smug Fireside, Images of the New England Home, 1760-1860*. New York: Alfred A. Knopf, 1993.

Pousson, John F. "Archeological Excavations at Arlington House." (archeological report, April 1968).

Pousson, John F. "Archeological Excavations at Arlington House." (archeological report, April 1983).

Snell, Charles W. "Historic Structures Report: Historical Data Section, Volume I (1802-1933)." (draft HSR, photocopy Denver Service Center, March 1982).

Snell, Charles W. "Historic Structures Report: Historical Data Section, Volume II (1933-1979)." (draft HSR, photocopy, Denver Service Center, April 1983).

*Historic Structures Report*

- Snell, Charles W. "Historic Structures Report: Structural Data Section, Volume I of II (1933-1942)." (draft HSR, photocopy, Denver Service Center, August 1985).
- Snell, Charles W. "Historic Structures Report: Historical Data Section, Volume II of II (1933-1942)." draft. Denver Service Center, August 1985.
- Snell, Charles W., Edited by Harlan D. Unrau. "Historic Structures Report. Historic Data Section Arlington House The Robert E. Lee Memorial, Virginia. Volumes 1-3." (Denver Service Center, Eastern Team. National Park Service, US Department of Interior, Denver, Colorado). CRBIB#013459.
- Swartz, Paul C. and John O. Roberts. "Historic Structures Report: North Servant's Quarters, Custis-Lee Mansion, Virginia, Part I." 1960.
- Swartz, Paul C. and John O. Roberts. "Historic Structures Report: North Servant's Quarters, Custis-Lee Mansion, Virginia, Part II." 1961.
- "The Restoration of Arlington Mansion" (Lecture given by L. M. Leisenring with slides at Archives auditorium for Thornton Society, April 16, 1945).
- Vlach, John Michael. *Back of the Big House*. Chapel Hill: University of North Carolina Press, 1993.

# Appendix A

*National Park Service*

*List of Classified Structures*

---



# North Servants' Quarters- Arlington House



## Identification

Preferred Structure Name: North Servants' Quarters-Arlington House  
 Structure Number: AHQN  
 Park: George Washington Memorial Parkway  
 Park District: 3300  
 Historic District: (Empty)  
 Structure State: Virginia  
 Structure County: Fairfax

## Other Structure Name(s)

None.

## UTM(s)

Zone	Easting	Northing	Source
18	320160	4305445	(Empty.)

## Historical Significance

National Register Status: Entered - Documented  
 National Register Date: 10/15/66  
 National Historic Landmark? No  
 National Historic Landmark Date: (Empty)  
 Significance Level: Contributing  
 Short Significance Description: 1 of 2 bldgs.contemp.w/construct.of Main house.20'x40'w/stone  
 Found.nonconnecting Rooms w/3evenly spaced doors face courtyard.brick  
 Buildings stuccoed w/rough texture.arches & pilasters decorate gable ends &  
 north face.summer Kitchen/slave quarters.  
 Long Significance Description: (Empty)  
 Construction Period: Historic

## Chronology

Physical Event	Begin Year	End Year	Designer	Designer Occupation
Built (BU)	1803	1818	Hadfield, George (possibly)	Architect (A)
Moved (MV)	1933	(Empty.)	NPS (transferred to)	Other (O)
Altered (AL)	1967	(Empty.)	NPS (prepared for adaptive reuse)	Other (O)

## Function and Use

Primary Historic Function: Institutional Housing  
Primary Current Use: Secondary Structure (Garage)  
Structure Contains Museum Collections? Yes

## Other Function(s) and Use(s)

Other Function(s) or Use(s)	Historic or Current
Visitor Contact (Visitor Center) (04EC)	Current ( )

## Physical Description

Structure Type: Building  
Volume: 2,000 - 20,000 cubic feet  
Square Feet: (Empty)  
Short Physical Description: Drawings at denver Service Center under record group ncp-117.much Information was found.  
Long Physical Description: (Empty)

## Materials

Structural Component(s)	Material(s)
Foundation (1)	Stone (40)
Walls (3)	Brick (30)
Roof (4)	Slate (45)
Other (5)	Stucco (61)
Framing (2)	03 (03)

## Condition and Impacts

Structure Condition: Fair  
Year Condition Assessed: 1998  
Impact Level: Moderate  
Primary Impact: Visitation

## Other Impact(s)

Other Impact Type
Park Operations (POP)

## Management - Legal

Legal Interest: Fee Simple

Fee Simple Life: 0

Fee Simple Reservation Expiration (Empty) Date:

Federal Government Owner (if owned by other Federal Agency): (Empty)

Local Government Owner (if any): (Empty)

Management Agreement: None

Management Agreement Expiration Date: (Empty)

Management Category: Must Be Preserved and Maintained

Management Category Date: 12/5/90

Ultimate Structure Treatment: Restoration

Ultimate Treatment Document: General Management Plan

Ultimate Treatment Document Date: 2/12/67

Was Ultimate Treatment Approved? No

Was Ultimate Treatment Completed? Yes

Ultimate Treatment Responsibility: National Park Service

Ultimate Treatment Cost: 0

Ultimate Treatment Cost Estimate Date: 8/1/91

Estimate Level: Similar Facilities

Estimator: Regional Office

Interim Treatment Responsibility: National Park Service

Interim Treatment Cost: 15000

Interim Treatment Cost Estimate Date: 8/1/91

Routine Maintenance Responsibility: National Park Service

Cyclic Maintenance Responsibility: National Park Service

Short Management Text: The building was stabilized and prepared for adaptive reuse.currently Used on a concession contract as a bookstore.1 Of 2 outbuildings built at time of main house.continue Routine maintenance.

Long Management Text: (Empty)

Documentation Level: Good

Last Updated: 6/3/98

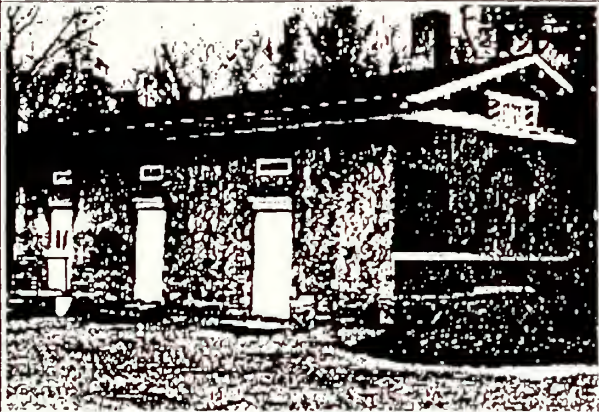
## Other Reference(s)

Source	Reference Number
National Register Information System (NR)	66000040
HABS (HABS)	VA-443
Cultural Resource Management Bibliography (CRBIB)	001088
Cultural Resource Management Bibliography (CRBIB)	001086



Cultural Resource Management Bibliography (CRBIB)	001089
Cultural Resource Management Bibliography (CRBIB)	001090
Other (OTH)	OTHER REF.ON CRBIB-27 TOTAL
Other (OTH)	DRAWINGS AT DSC-TIC:NCP-117

## Graphic(s)

Graphic	Graphic Caption	Graphic Date/Year
	(Empty.)	(Empty.)



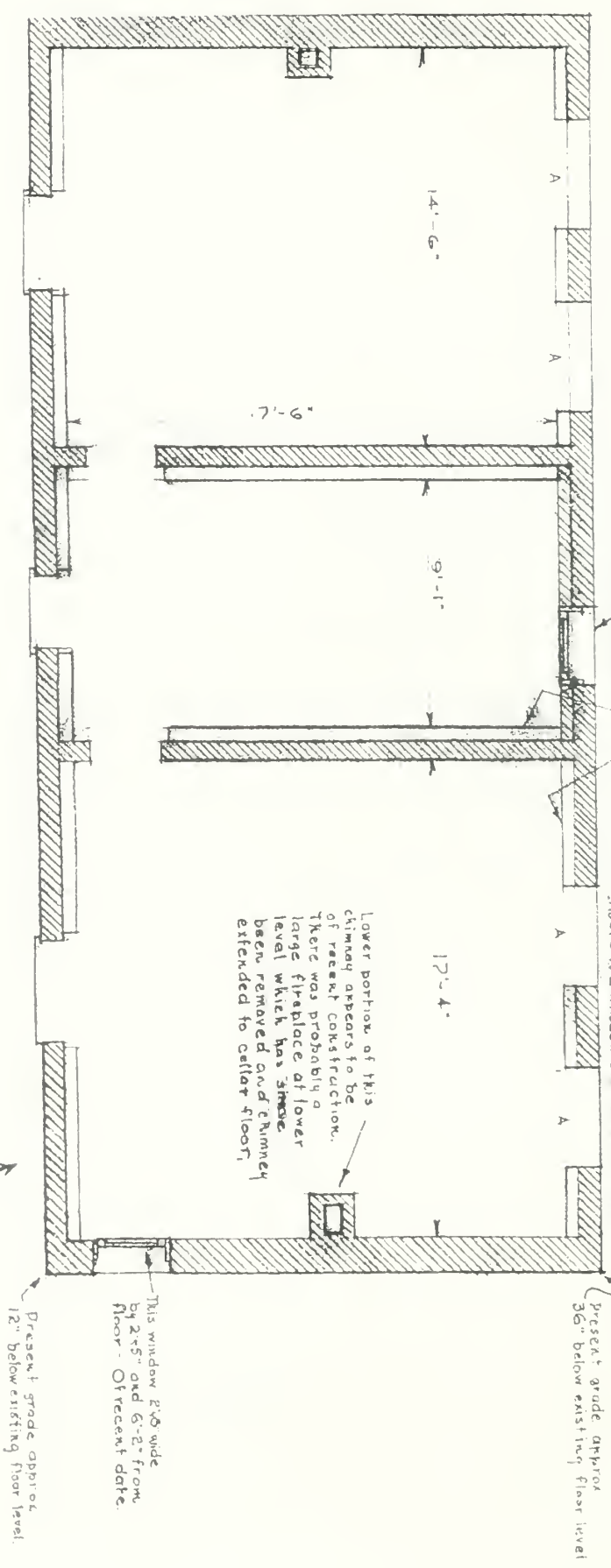
# Appendix B

## *Historic Drawings*

---



Ceiling 12'-0" above present floor level.



Sec. Note 'A'

Window 8'-0" high 3'-0" wide 5'-0" from floor

Indicates shoulder 3'-10" above present floor level. Probably supported joists of original floor

"A" These openings had been walled up; have now been reopened. They extend to top of shoulder. Wood lintels over. There is a window over each.

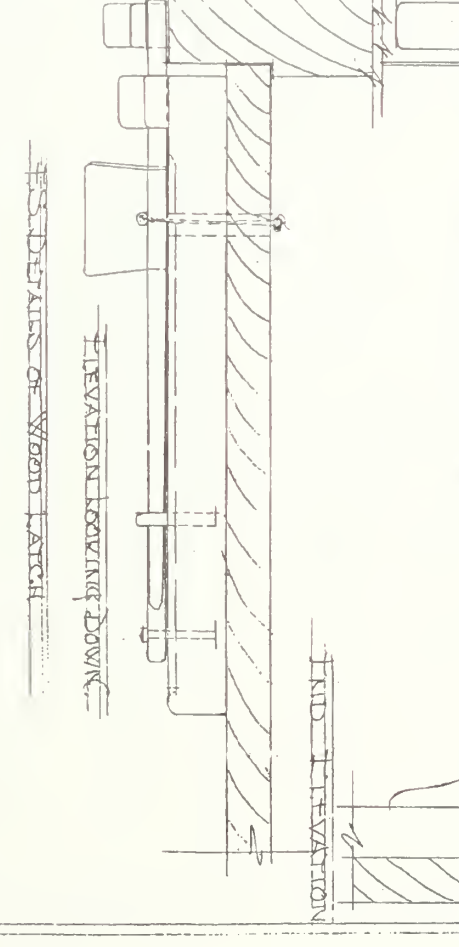
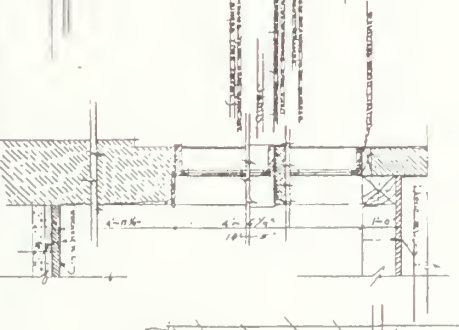
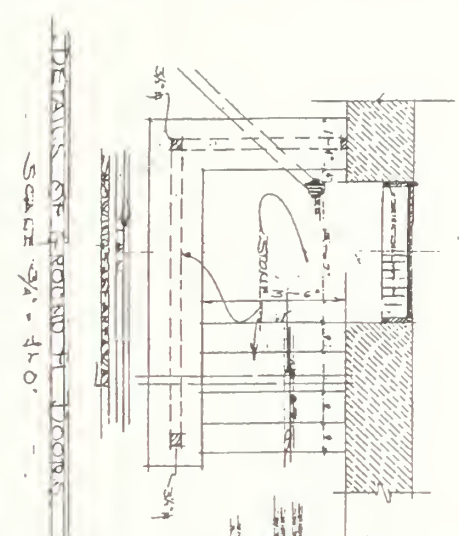
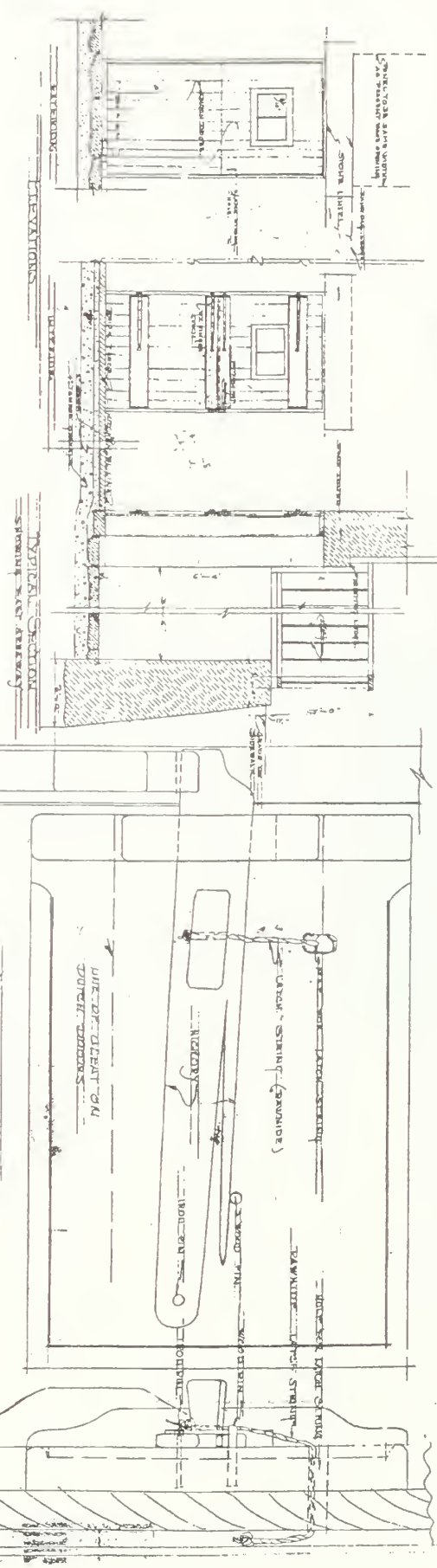
Lower portion of this chimney appears to be of recent construction. There was probably a large fireplace at lower level which has since been removed and chimney extended to cellar floor.

This window 8'-0" wide by 2'-5" and 6'-2" from floor. Of recent date.

Present grade approx 36" below existing floor level

Present grade approx 12" below existing floor level

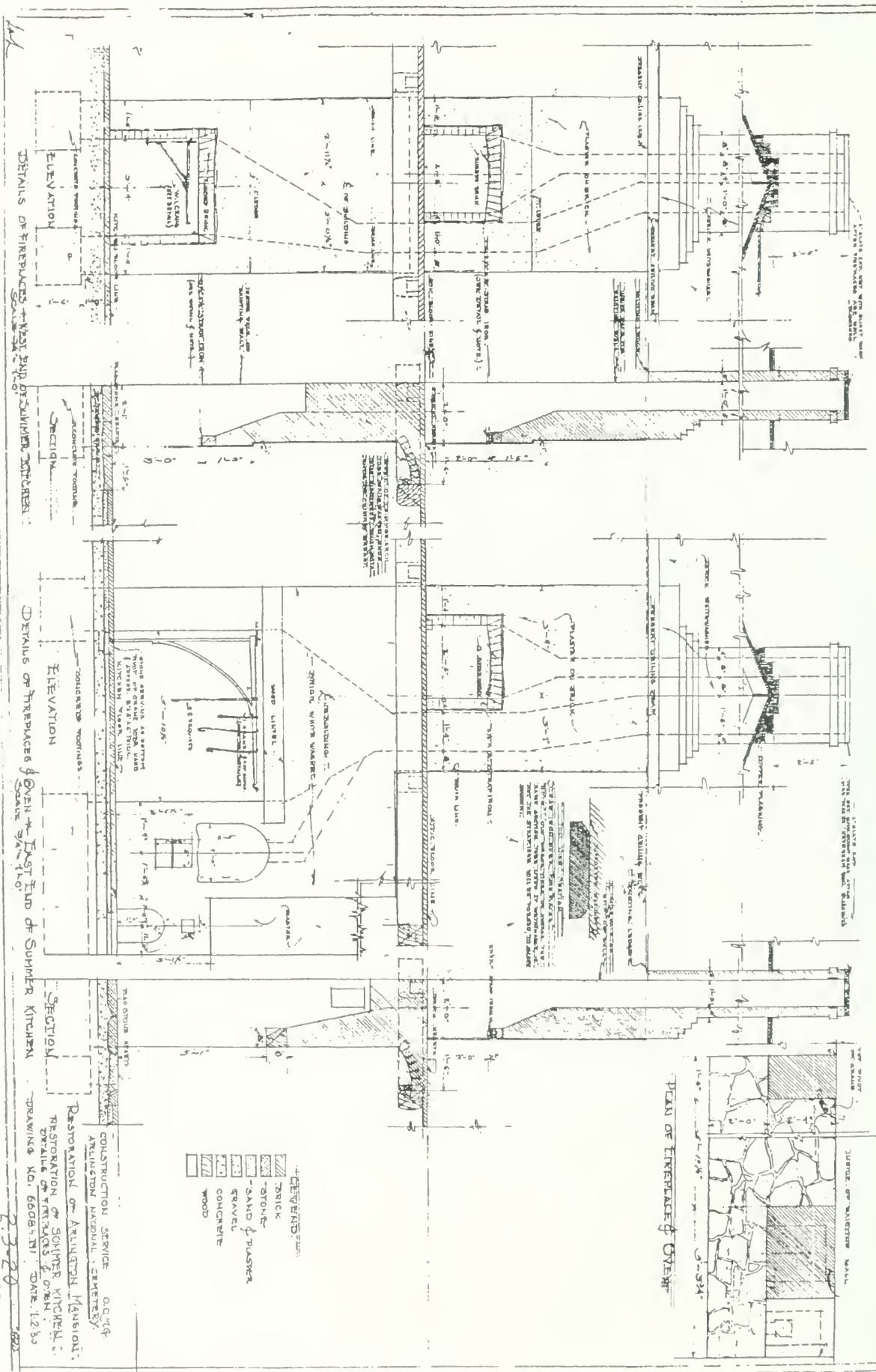
There is reputed to have been a flight of steps here and an entrance to lower level. Examination of interior of cellar wall shows evidence of bricked up opening.



CONSTRUCTION SERVICE  
ARLINGTON NATIONAL CEMETERY  
RESTORATION OF ARLINGTON MANSION  
DETAILS OF DOORS, AND WINDOWS  
DRAWING NO. 6608-192. DATE 12.30.

2.3-19

855/80190

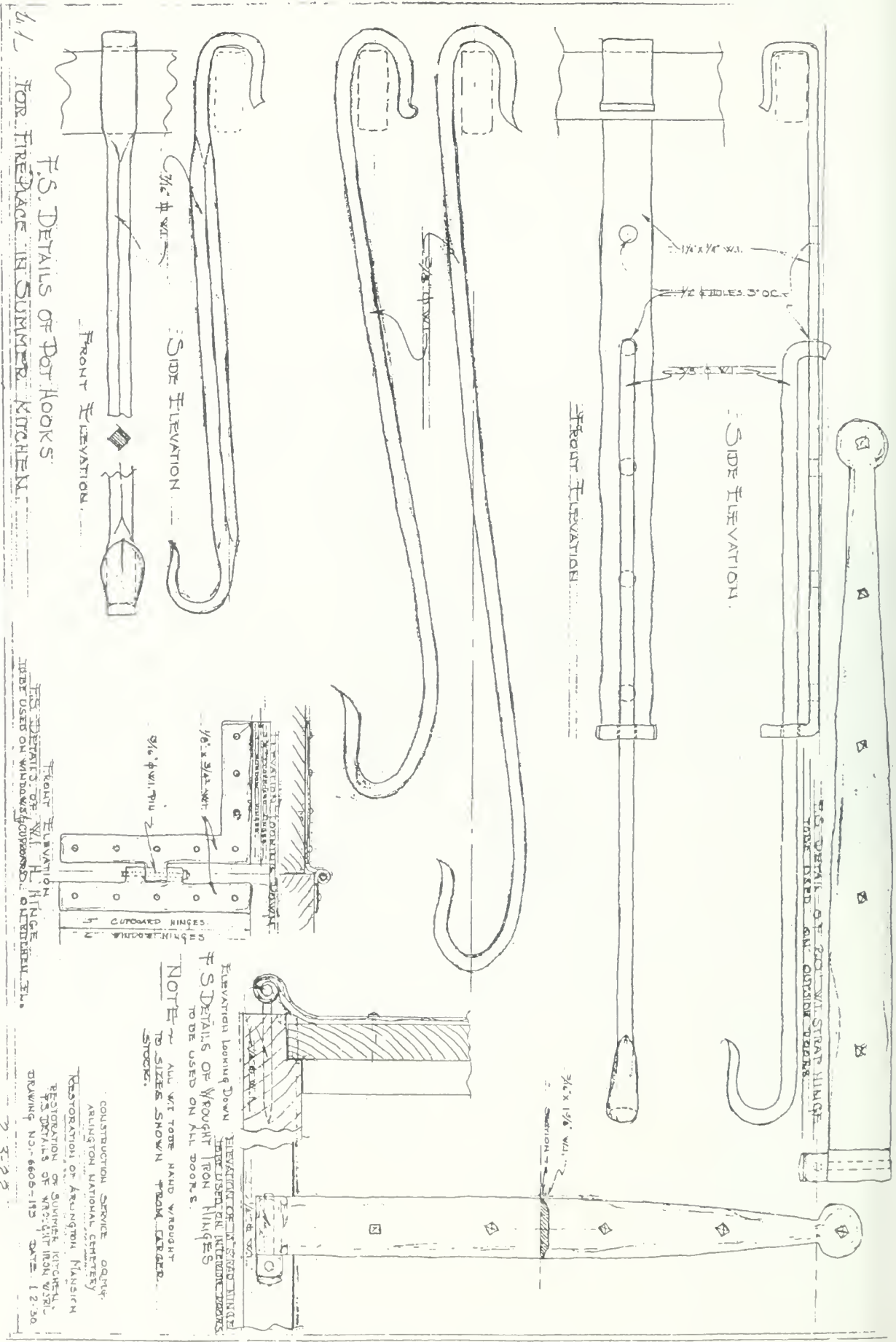


2.3-20

855 / 80191





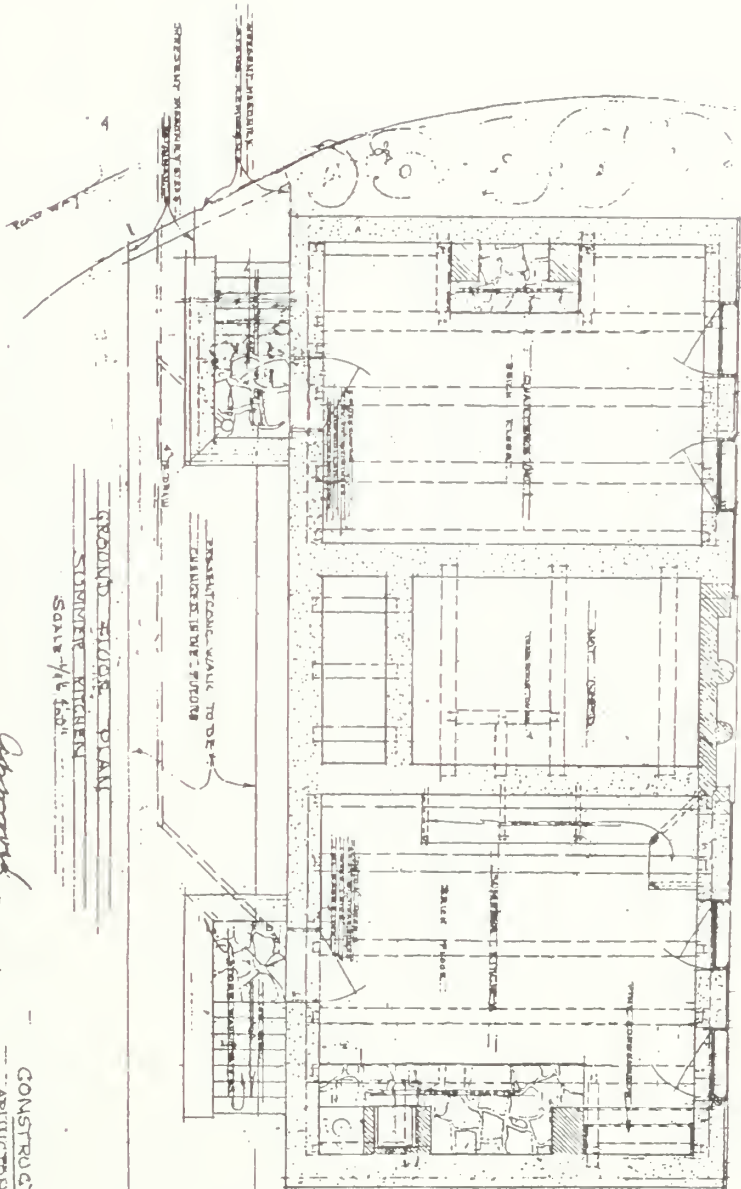


2.3-22

855/80193

CHERRY STATION.

NOTE: WATER WINDROW TOMMYES & THE W.I. WINDROW  
ALSO 1944 - MARY JOHN - MARY JOHN - MARY JOHN  
WATER WINDROW TOMMYES & THE W.I. WINDROW



GROUND FLOOR PLAN  
SUMMER KITCHEN  
SALE YAC food

Approved  
Wm. B. D.

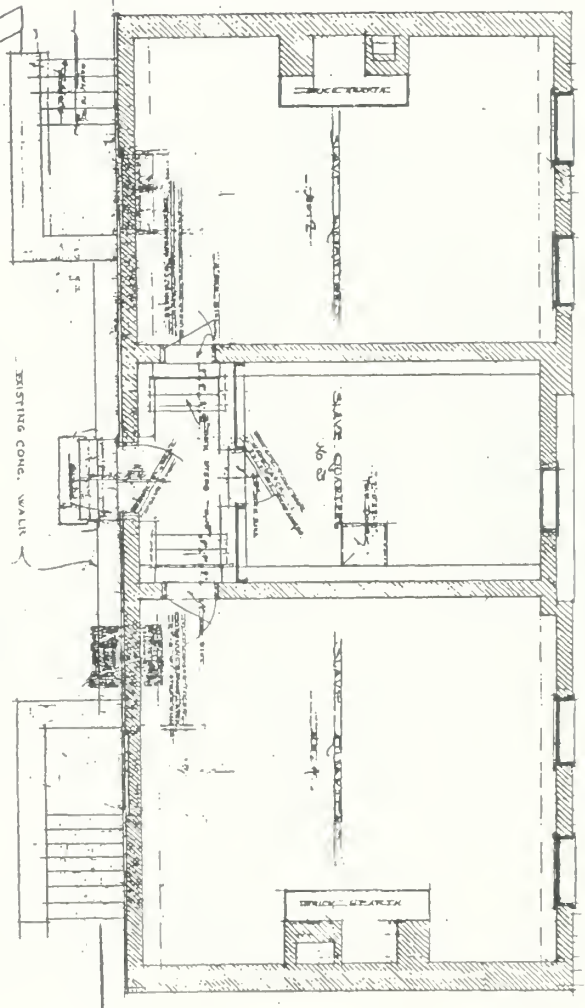
CONSTRUCTION SERVICES - COMM-  
ARTICULAR NATIONAL ENERGY  
RESTORATION OF ATOMIZATION TRANSITION  
RESTORATION OF SUMMER JUDGE  
DATE: NOV. 23. 1974  
NID6606-1/EN

2-3-42

855/80182



Notes: ALL DIMENSIONS, THICKNESS, ETC. TO BE  
 SHOWN ON THIS PLAN. SEE ALSO VERTICAL SECTION.



ATTIC FLOOR PLAN  
 SUMMER KITCHEN  
 24' 0" x 16' 0"

*As shown  
 1840-1845  
 by line guide*

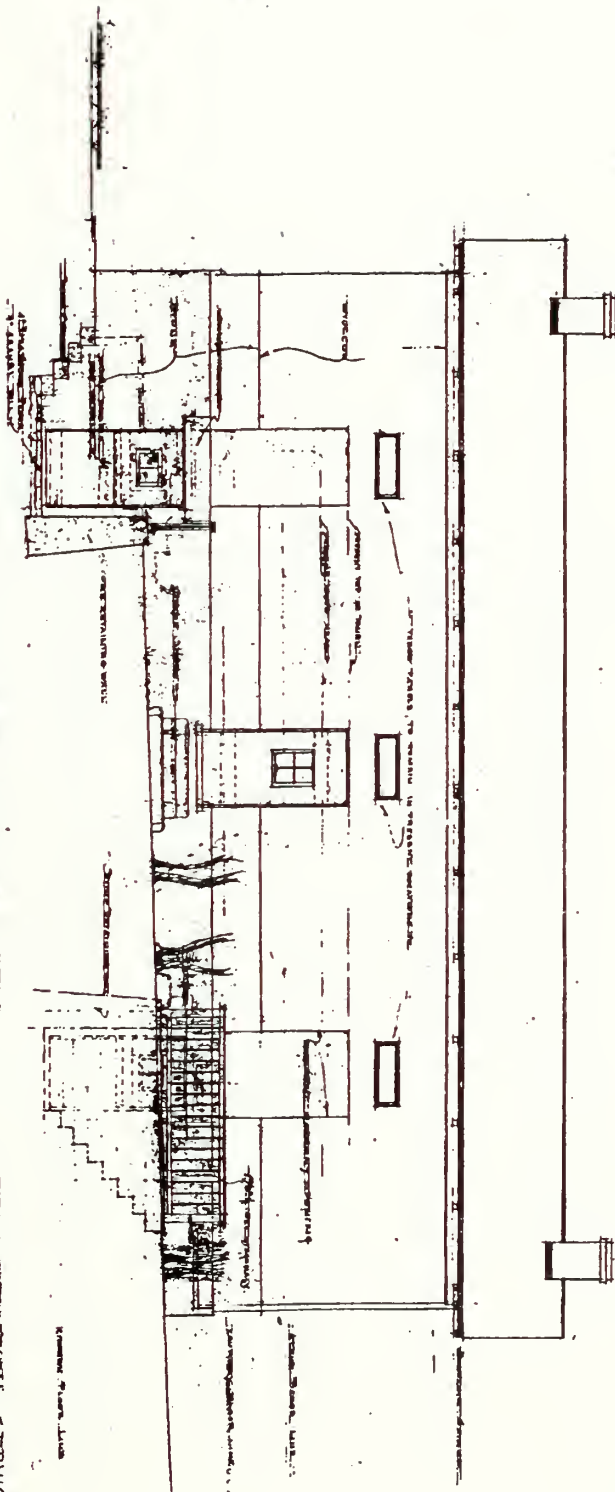
CONSTRUCTION SERVICE BUREAU  
 ARLINGTON NATIONAL CEMETERY  
 RESTORATION OF ARLINGTON MANSION  
 RESTORATION OF SUMMER KITCHEN

DATE: 10-1-50  
 10-1-50  
 10-1-50

2.3-43

855/80183

d. 2.3-43

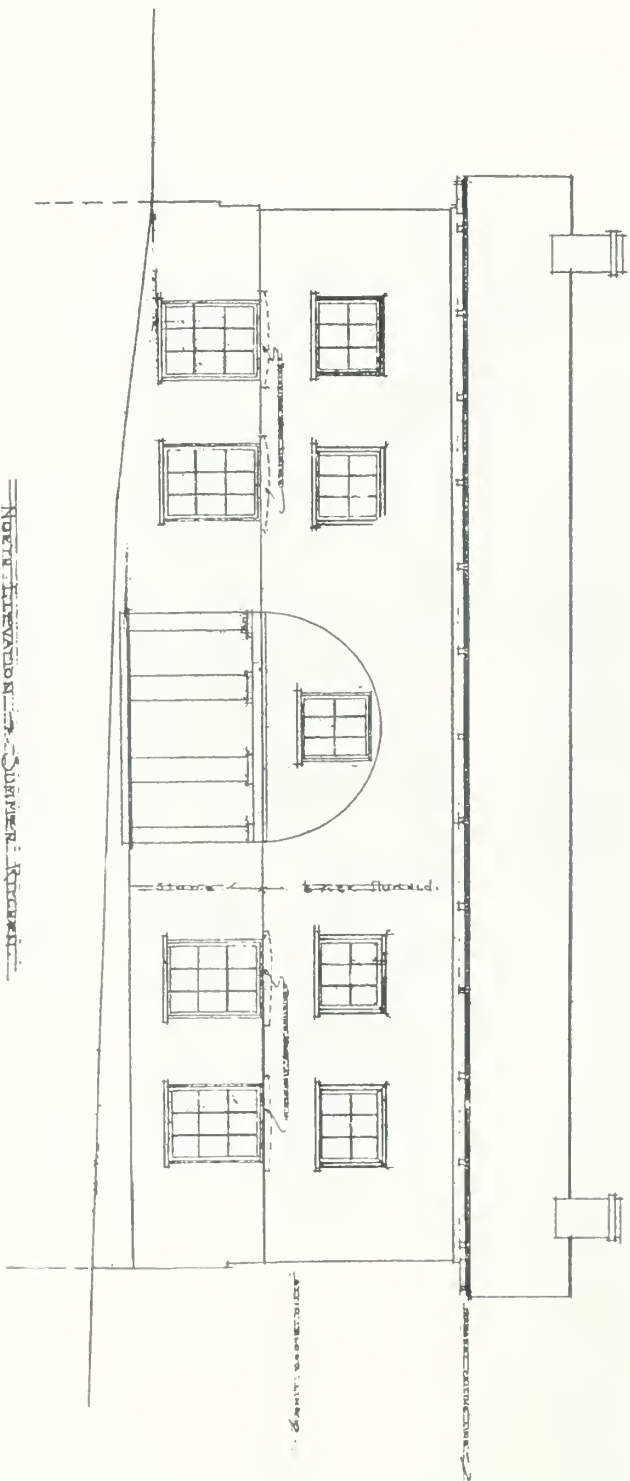


SOUTH ELEVATION - Summer Kitchen  
Scale: 1/4" = 1'-0"

CONSTRUCTION SERVICE - O.D.M.G.  
ARLINGTON NATIONAL CEMETERY  
RESTORATION OF ABOLITION MANSION  
RESTORATION ARCHITECT - ALICIA  
DATE: NOV. 23 - 84  
PERMIT: JAN. 2 - 85

23-44

855/80184



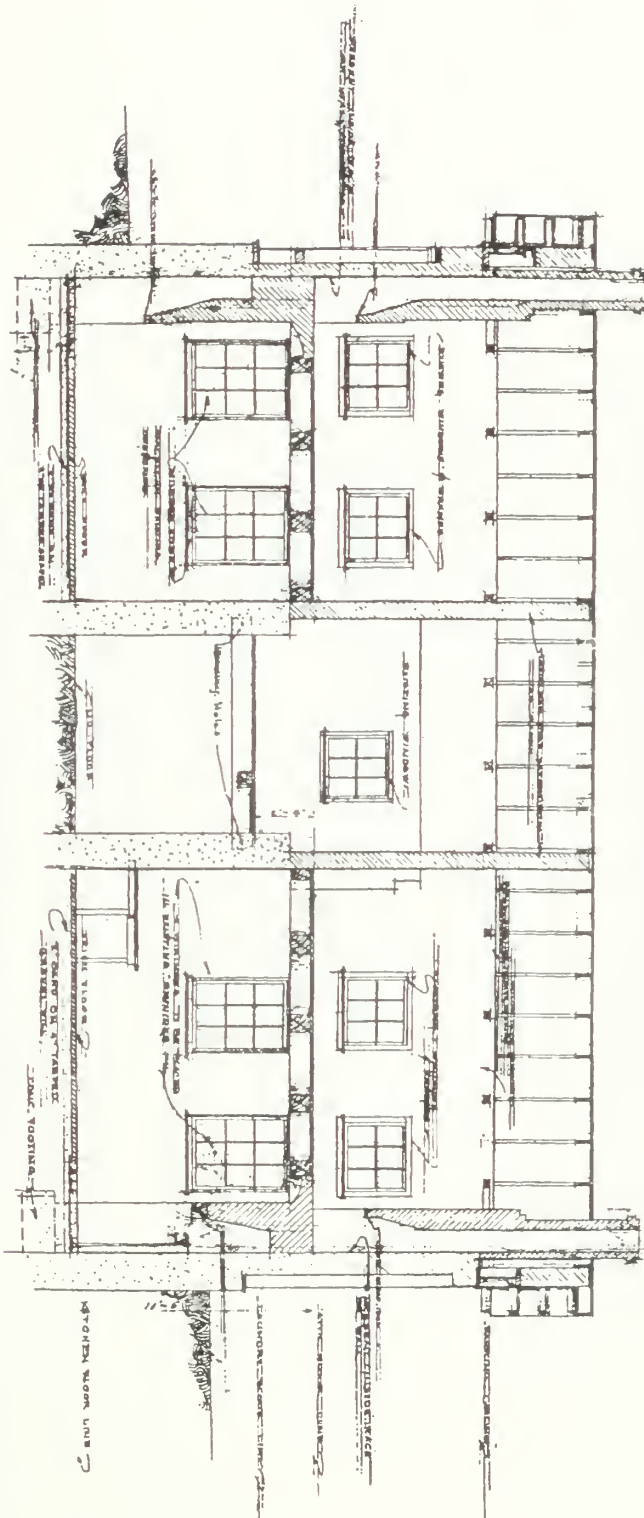
NORTH ELEVATION - SHRINE KITCHEN  
SCALE 1/4" = 1'-0"

2-3-45

CONSTRUCTION: SERVICE BLDG.  
ARLINGTON NATIONAL CEMETERY/  
RESTORATION OF ARLINGTON MANSION  
RESTORATION OF SHRINE KITCHEN  
NO. 6605-153  
DATE: NOV. 2, 1945  
DESIGNED BY: [illegible]

555/80185





# LONGITUDINAL SECTION - SERVICE KITCHEN

Scale 1/4" = 1'-0"

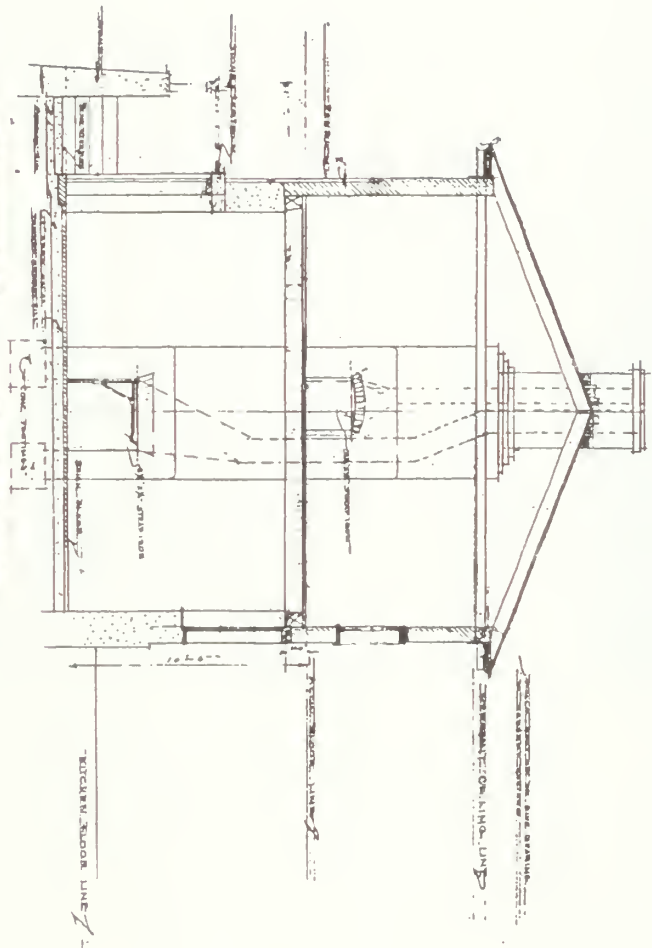
CONSTRUCTION SERVICE DIVISION  
 ARLINGTON NATIONAL CEMETERY  
 RESTORATION OF ARLINGTON MANSION  
 RESTORATION OF SERVICE KITCHEN  
 NO. 6608716  
 DATE: NOV. 2, 1966  
 DRAWN BY: J. H. H. H.

23-46

855/80186

C. 2.3-46





TRANSVERSE SECTION SHOWING KITCHEN WALL  
 SURFACE KITCHEN  
 SCALE 1/4" = 1'-0"

CONSTRUCTION SERVICE DIVISION  
 ARLINGTON NATIONAL CENTER  
 RESTORATION OF ARLINGTON MANSION

RESTORATION OF SURFACE KITCHEN  
 DATE NOV 1988  
 100-100-100

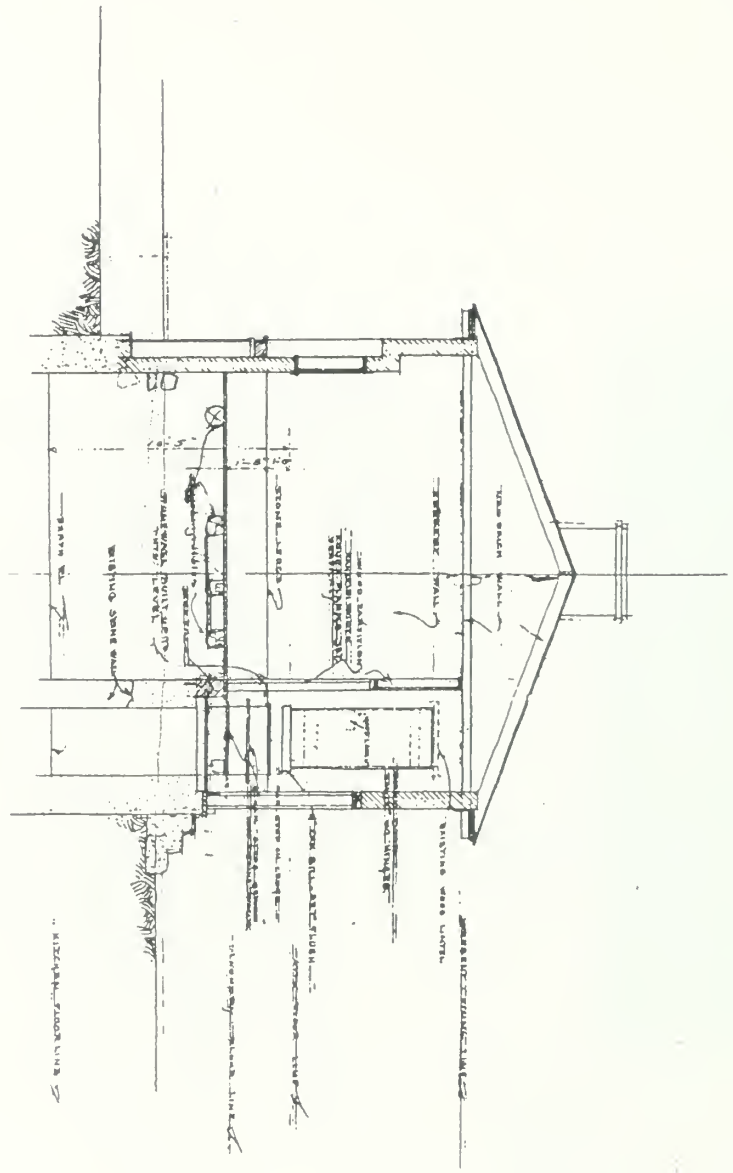
2.3-48

855/80188



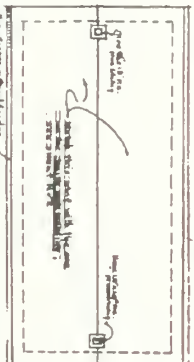
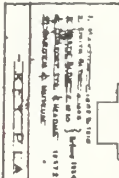
2.3-49

TRANSVERSE SECTION TARD. LAUNDRY  
 SUMMER KITCHEN  
 SCALE 1/4" = 1'-0"



CONSTRUCTION SERVICE OF COMPTON  
 ARLINGTON NATIONAL CEMETERY  
 RESTORATION OF ARLINGTON MANSION  
 RESTORATION OF SUMMER KITCHEN  
 NO. 607-189  
 DATE NOV. 20, 1949  
 REVISED JAN. 17, 1950

855 / 80189  
 C. 2.3-49



DOMESTIC SHAWING  
TYPICAL STEEL COLUMN  
SUPPORT - ~~WATER TIGHT~~  
(~~10-2000000~~)  
SEE DRAWING FOR COL. SPACINGS

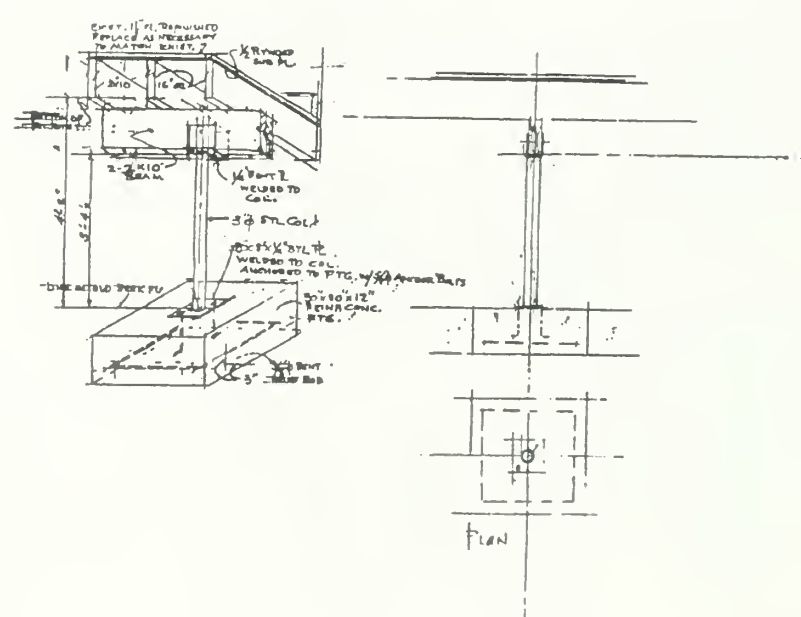
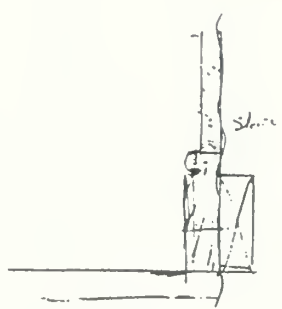
NOTED BY PERSONnel THAT THE  
RECURRING ATTEMPTS TO  
ROBBERIES OF ELECTRICAL  
WIRING, LOCATION OF POWER  
CABLES AND ROADSIDE FIRE  
ALARM SYSTEM.

STREET BUILDINGS & STREETS, BARNUM  
WILL TRAVEL NORTH & LIVE BACK  
AT BARNUM TO WRITE CRITIC MATERIAL

[illegible]

~~RECORDED - 1937~~

[illegible][illegible]



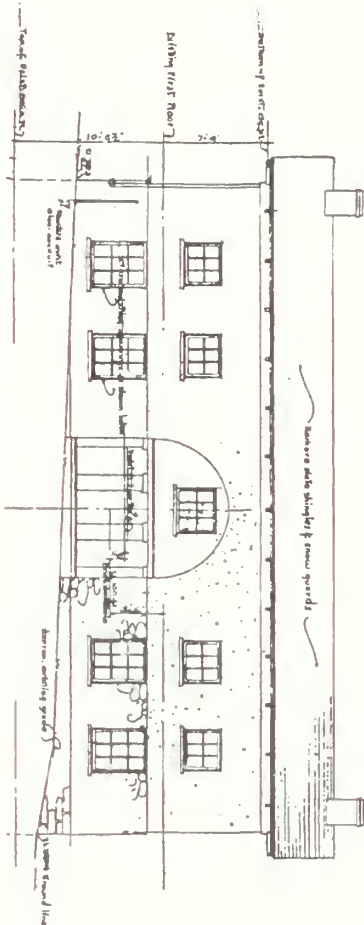
REDUCED SIZE REPRODUCTION

855/41003

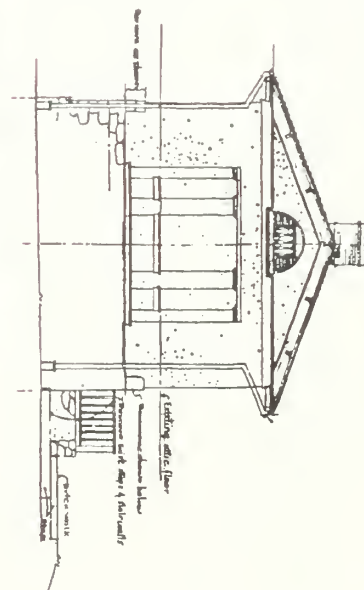
855  
0000

part of sheet one

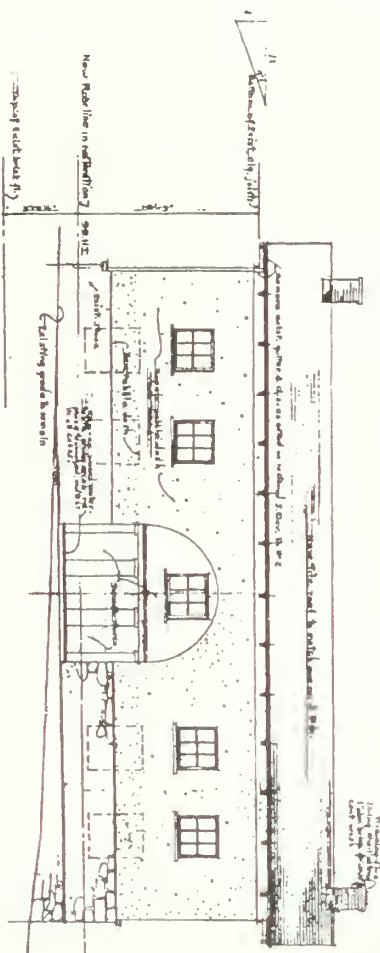




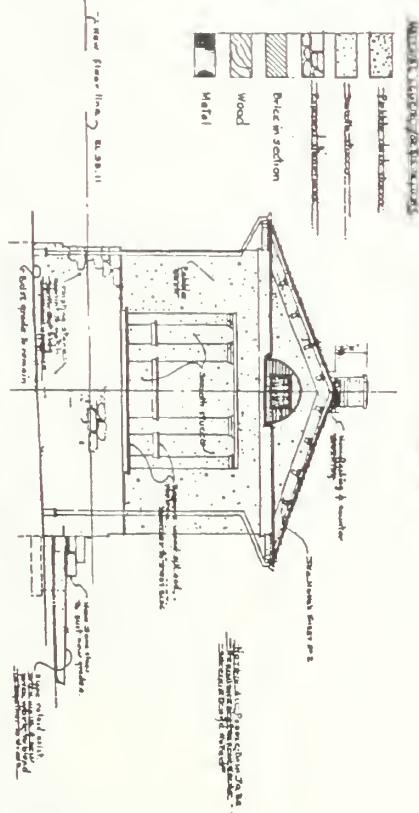
EXISTING NORTH ELEVATION



EXISTING WEST ELEVATION



### PESTICIDE NO. 210. EVALUATION



### SECTION 4.3.0.1.1.1.1 ELEVATION

2. The 1st was a live one. he said.  
 on a road about 1/2 m. off road.  
 on the N.W. corner of 111 (S. 111 m.)  
 of the North wing of the garden

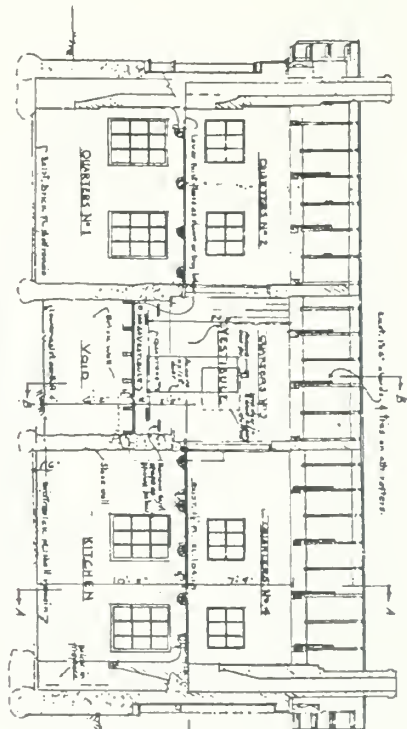
ref. 23-100-2  
80-100-2

NORTH & WEST ELEVATIONS:

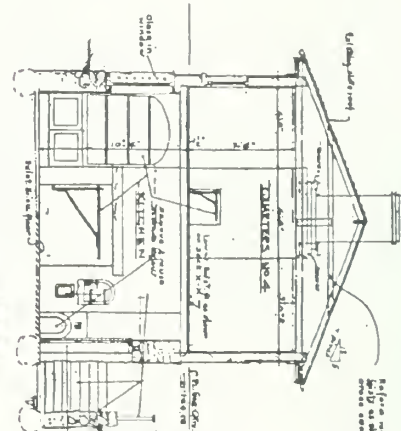
[illegible][illegible]

2.3-100-3

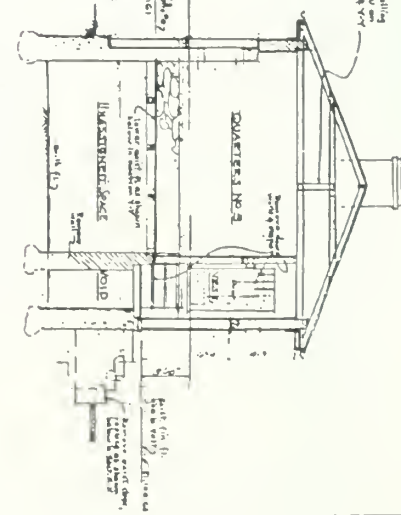
855/41003



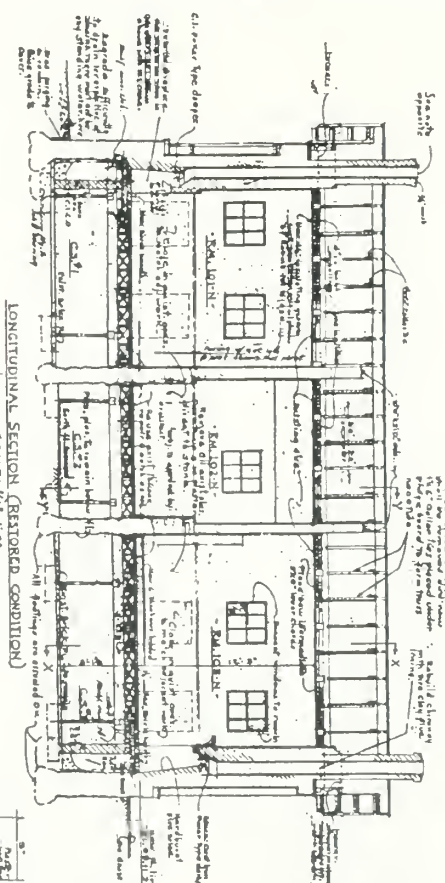
LONGITUDINAL SECTION (EXISTING CONDITION)



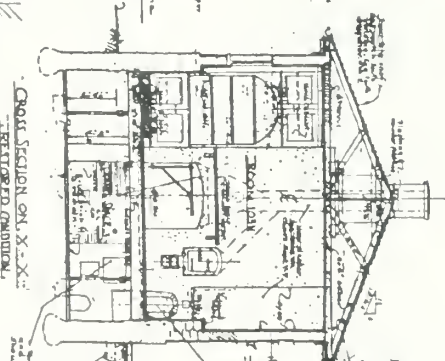
CROSS SECTION A-A THRU KITCHEN  
(EXISTING CONDITION)



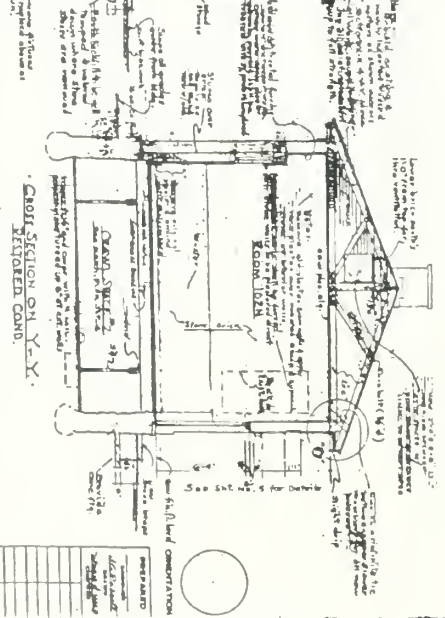
CROSS SECTION B-B THRU CENTER  
(EXISTING CONDITION)



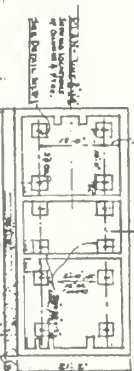
LONGITUDINAL SECTION (RESTORED CONDITION)



CROSS SECTION ON X-X  
(RESTORED CONDITION)



CROSS SECTION ON Y-Y  
(RESTORED CONDITION)



CHARTER NO. 1  
CHARTER NO. 2  
CHARTER NO. 3  
CHARTER NO. 4  
RESTROOM  
KITCHEN  
BATH

NO.	DATE	REVISION
1	10/1/68	REVISION
2	10/1/68	REVISION
3	10/1/68	REVISION
4	10/1/68	REVISION
5	10/1/68	REVISION
6	10/1/68	REVISION
7	10/1/68	REVISION
8	10/1/68	REVISION
9	10/1/68	REVISION
10	10/1/68	REVISION

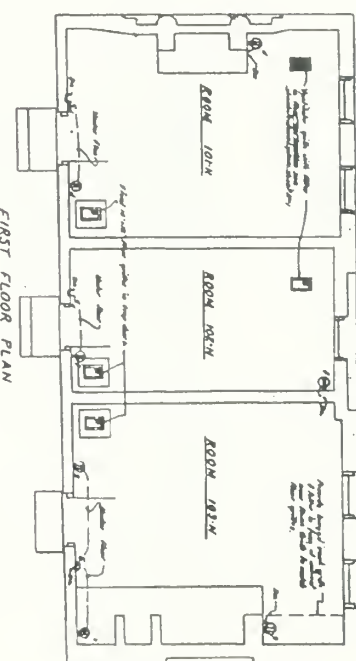
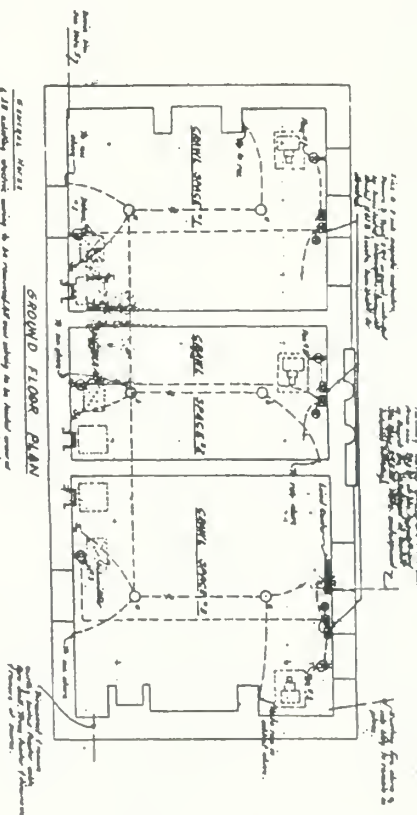
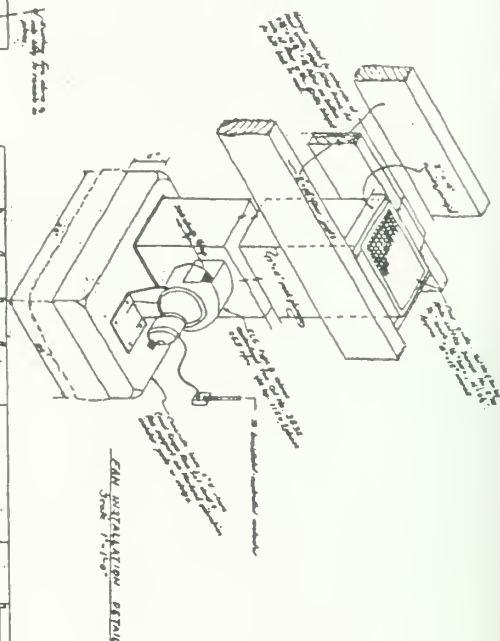
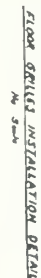
2.3-100-4

855/41003

855/8000







1. *Staphylococcus aureus* (nos. 34, 35) remained most sensitive to the studied antibiotics. *S. aureus* nos. 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 85

## MECHANICAL & ELECTRICAL WORK

UNITED STATES DEPARTMENT OF THE ARMY NATIONAL, NAVAL SERVICES NATIONAL, NAVAL, PHARM	N.C.P
RESEARCH, DEVELOPMENT AND TEST CENTER	type 2 or 6
RESEARCH, DEVELOPMENT AND TEST CENTER	N.C.P
RESEARCH, DEVELOPMENT AND TEST CENTER	type 2 or 6
RESEARCH, DEVELOPMENT AND TEST CENTER	N.C.P
RESEARCH, DEVELOPMENT AND TEST CENTER	type 2 or 6



PRINTED BY  
C. & W. J.  
LONDON  
C. & W. J.  
C. & W. J.

2-3-100-6

855/41003  
855/80100



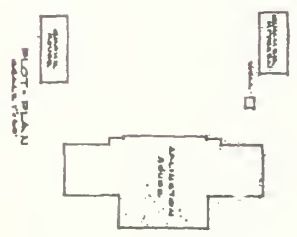
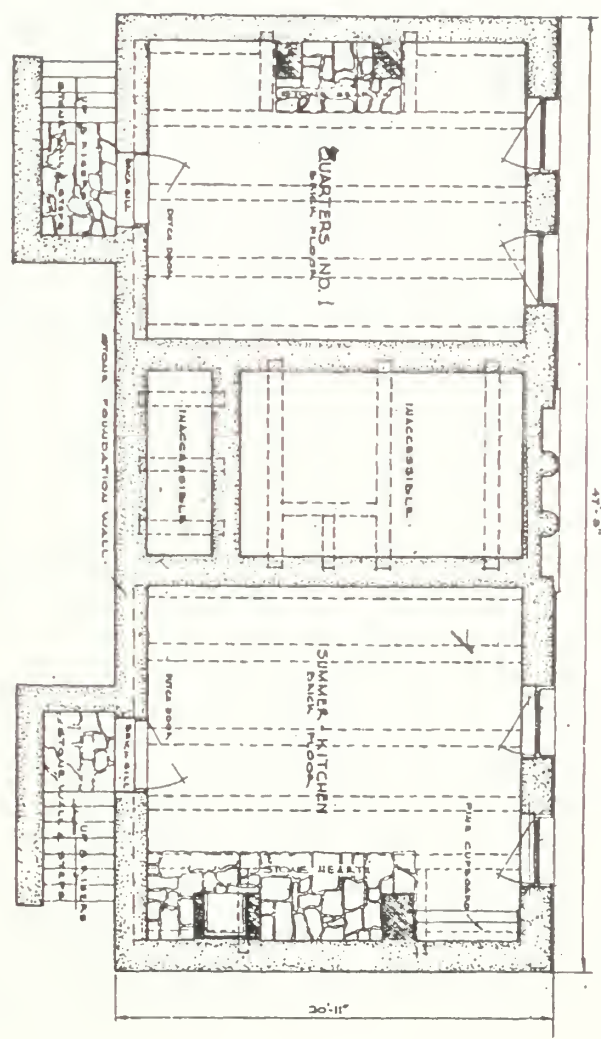


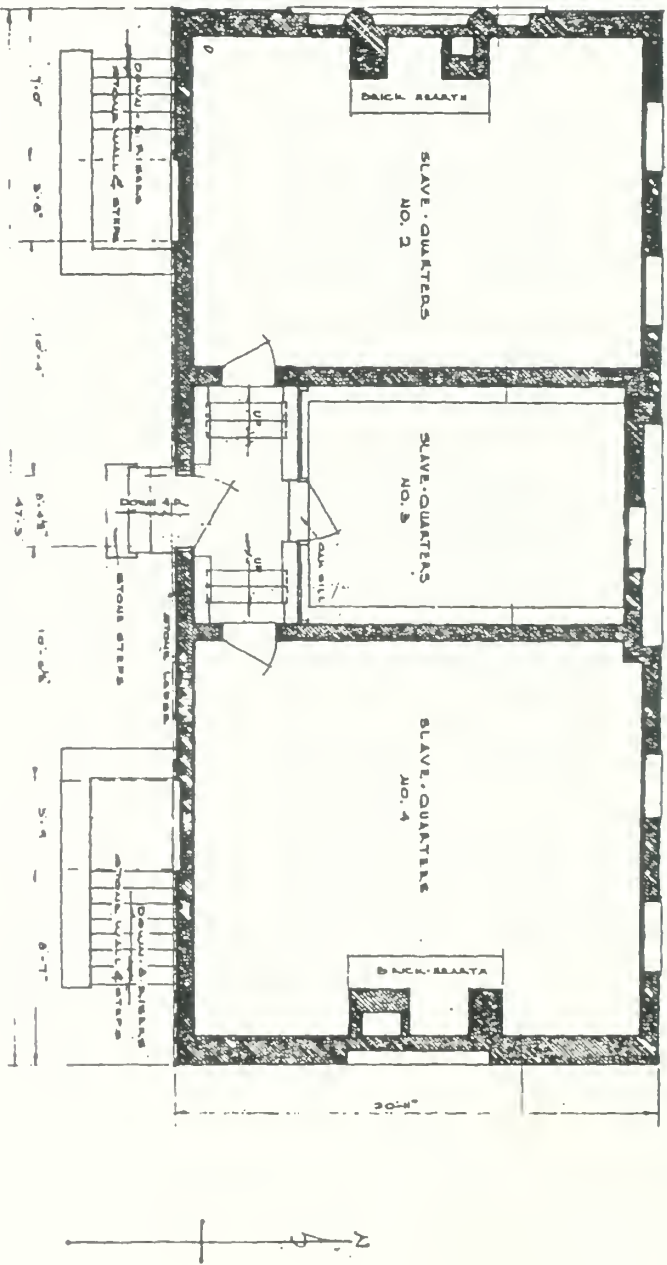


1-22-21

U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT NATIONAL SYSTEM OF PUBLIC LANDS		1740 PUBLIC WORKS ADMINISTRATION PROGRAM FEDERAL PROJECT 446-A	
ARRLINGTON COUNTY		NAME OF STRUCTURE ARRLINGTON HOUSE	
VIRGINIA		SURVEY NO. VA-43	
HISTORIC AMERICAN BUILDINGS SURVEY SHEET 10 OF 16 SHEETS		855 80066	

• GROUND - FLOOR - PLAN •  
 • SUMMER - KITCHEN •  
 SCALE 1/4" = 1'-0"





ATTIC FLOOR PLAN  
SUMMER KITCHEN  
SCALE 1/4" = 1'-0"

D. P. CLARK, D.E.L.T.  
1440 PUBLIC WORKS ADMINISTRATION PROGRAM  
FEDERAL PROJECT 4401A  
UNIVERSITY OF VIRGINIA DEPARTMENT OF THE HISTORIC  
NATIONAL PARK SERVICE DIVISION OF PLANNING AND DESIGN

ARLINGTON COUNTY

NAME OF STRUCTURE  
ARLINGTON HOUSE

VIRGINIA

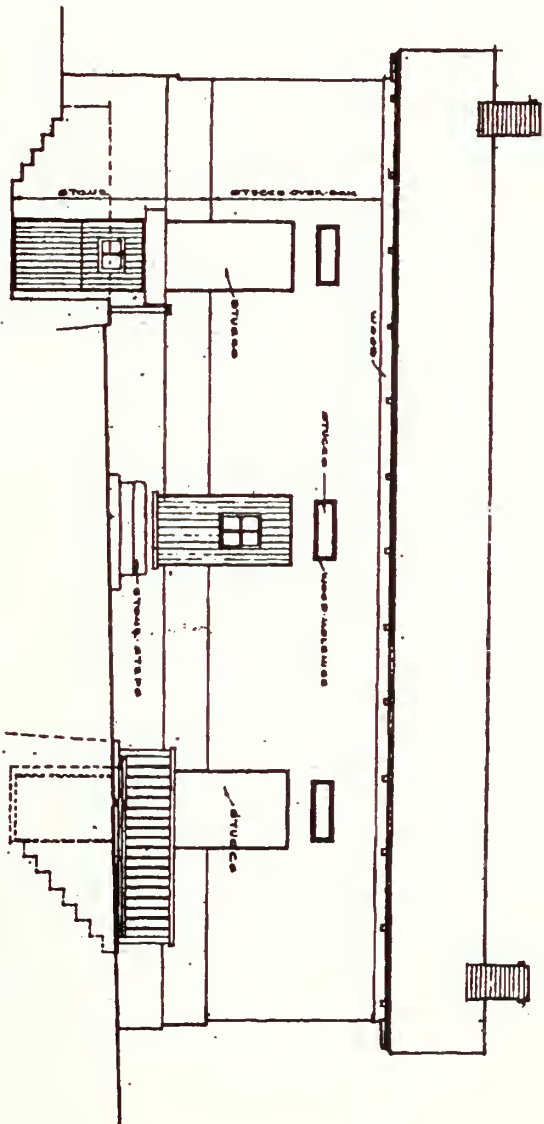
URKEY NO.  
VA-43  
HISTORIC AMERICAN  
BUILDINGS SURVEY  
SHEET 11 OF 18 PAGES



11-22-85

855  
80066

P. 11/18



SOUTH ELEVATION-SUMMER KITCHEN  
SCALE 1/4"=1'-0"



D. P. CLAUDIO, P.L.L.T.  
HMO-PUBLIC WORKS ADMINISTRATIVE PROGRAM  
FEDERAL PROJECT 446-A  
ARLINGTON COUNTY, VIRGINIA

ARLINGTON COUNTY  
ARLINGTON HOUSE

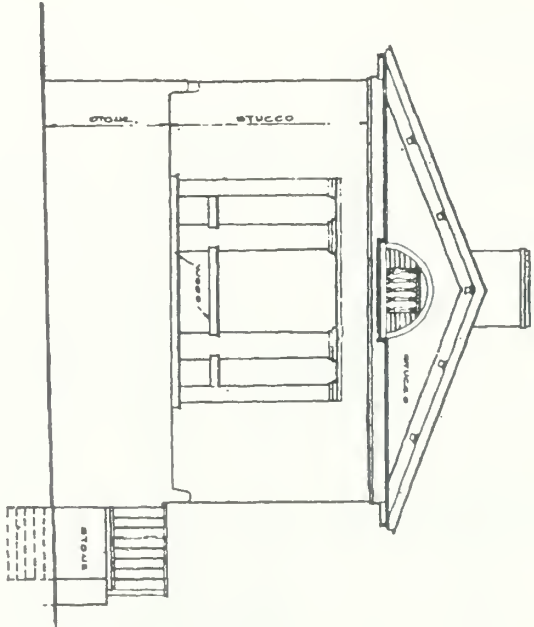
VIRGINIA

VA 443  
HISTORIC AMERICAN  
BUILDINGS SURVEY  
SHEET 12 OF 18 SHEETS

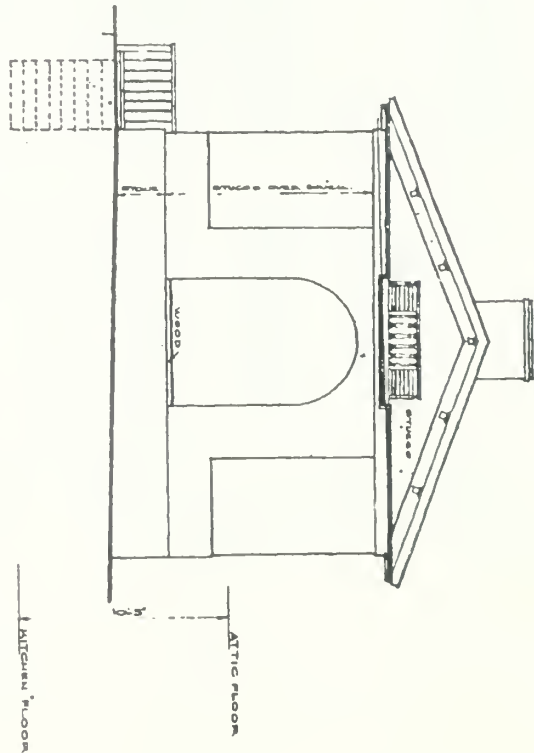
055  
12/18



21-22-3.2



WEST • ELEVATION



EAST • ELEVATION

SUMMER • KITCHEN  
SCALE 1/8" = 1'-0"

U.S. NATIONAL BUREAU OF STANDARDS  
1940 PUBLIC WORKS ADMINISTRATION PROGRAM  
FEDERAL PROJECT 490-A  
UNIVERSITY OF MICHIGAN  
NATIONAL ARCHIVES  
NATIONAL ARCHIVES  
NATIONAL ARCHIVES

ARLINGTON COUNTY

NAME OF STRUCTURE  
ARLINGTON HOUSE

VIRGINIA

REPORT NO.  
VA-443  
HISTORIC AMERICAN  
BUILDINGS SURVEY  
SHEET 15 OF 15 SHEETS



855  
80066

P. 13/18

U.S. PUBLIC WORKS ADMINISTRATION PROGRAM  
 FEDERAL PROJECT 416-A  
 NATIONAL PARK SERVICE, BRANCH OF PLANS AND SPECIFICATIONS

ARLINGTON COUNTY

ARLINGTON HOUSE

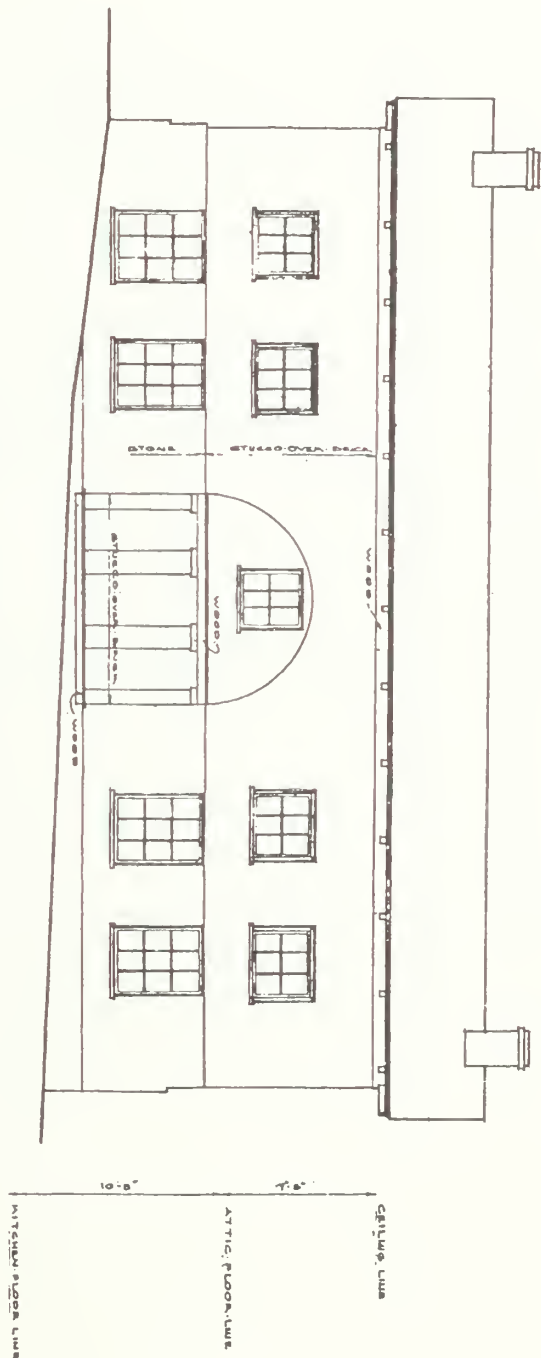
VIRGINIA

SURVEY NO. VA-413

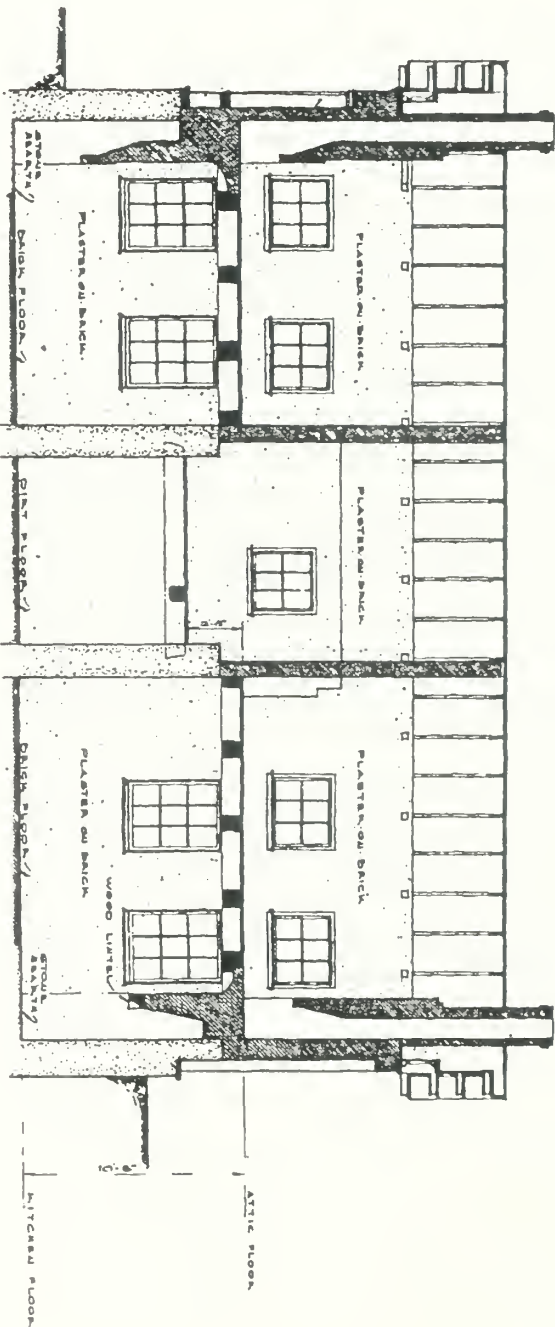
HISTORIC AMERICAN BUILDINGS SURVEY  
 SHEET 14 OF 14

DATE OF SURVEY  
 1938

NORTH ELEVATION - SUMMER KITCHEN  
 SCALE 3/8" = 1'-0"



855  
 6.14.18



LONGITUDINAL SECTION - SUMMER KITCHEN  
SCALE 1/8" = 1'-0"



SCALE IN FEET AND INCHES

D. C. CLARK, DELT  
H40 PUBLIC WORKS ADMINISTRATION PROGRAM  
FEDERAL PROJECT 446-A  
UNION OF THE CITY OF ARLINGTON FOR THE HISTORY OF THE  
NATIONAL PARK SERVICE, DIVISION OF PLANNING AND DESIGN

ARLINGTON COUNTY

NAME OF STRUCTURE  
ARLINGTON HOUSE

VIRGINIA

SURVEY NO.

VA-443

HISTORIC AMERICAN  
BUILDINGS SURVEY  
SHEET 15 OF 15 SHEETS

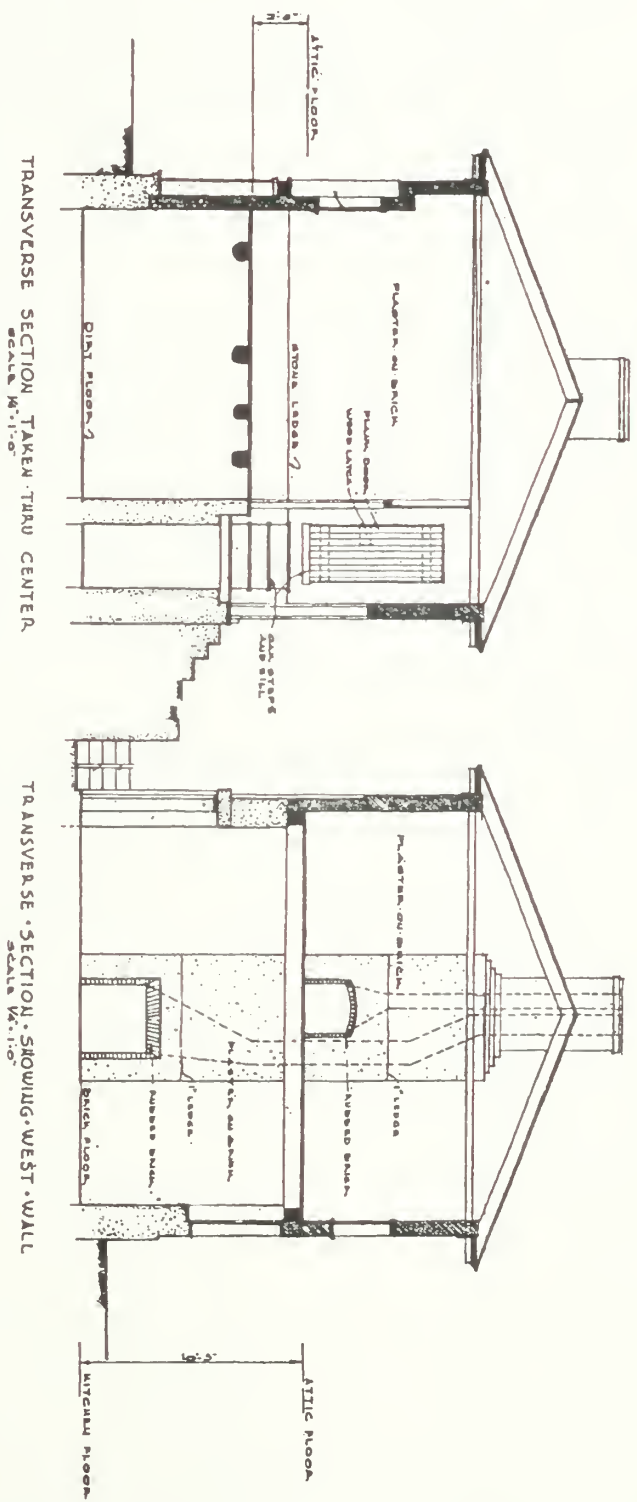
DATE OF SURVEY

22-1-5

855  
00066

P.15/18





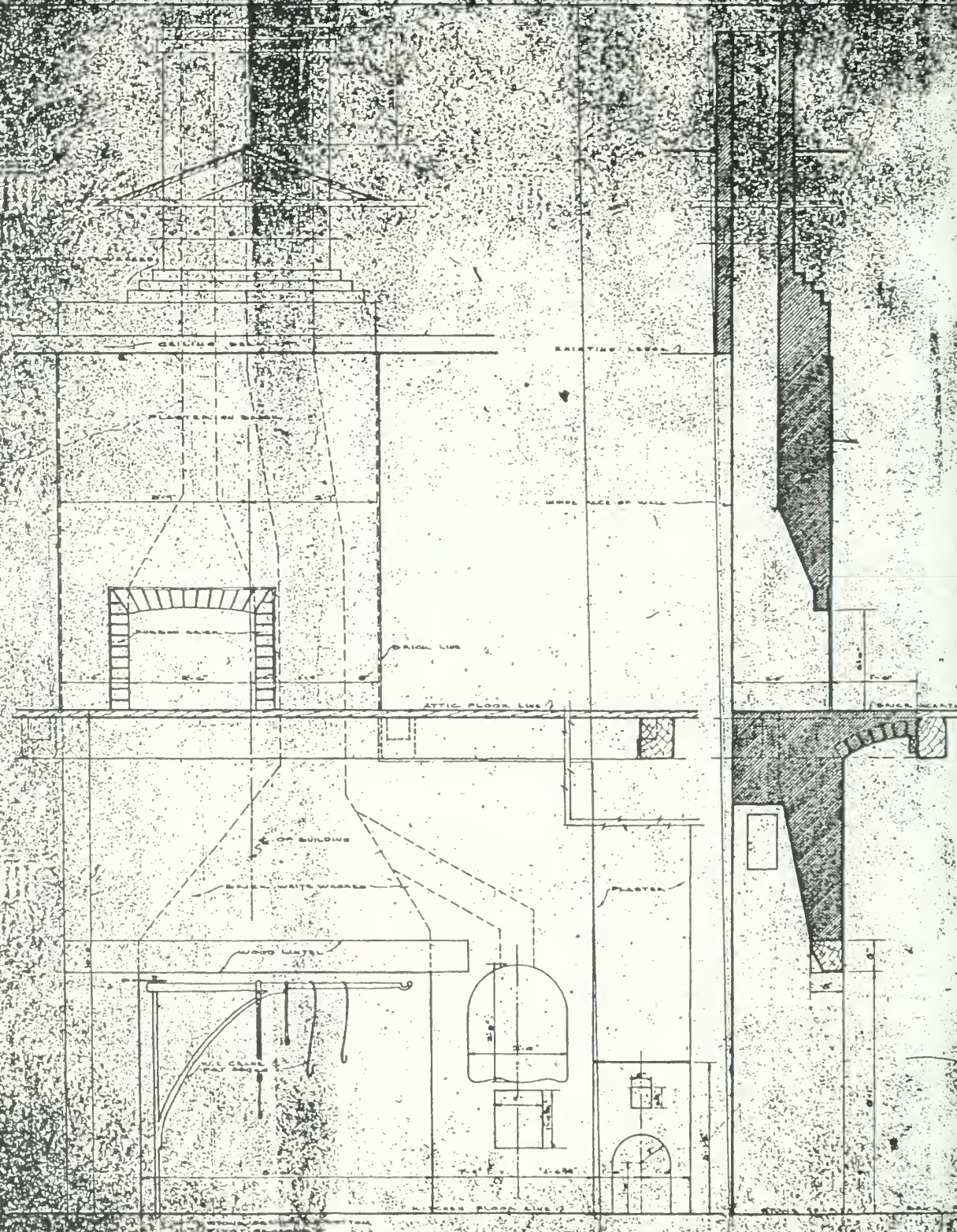
TRANSVERSE SECTION TAKEN THRU CENTER  
 SCALE 1/4" = 1'-0"

TRANSVERSE SECTION SHOWING WEST WALL  
 SCALE 1/4" = 1'-0"





# ARLINGTON HOUSE



DETAILS OF FIREPLACE & OVEN  
EAST END OF SUMMER HOUSE

SECTION

835  
0006  
NP 83-CC 471111



U.S. GOVERNMENT PRINTING OFFICE: 1940  
 1440 PUBLIC WORKS - ADMINISTRATION PROGRAM  
 FEDERAL PROJECT - 498 A  
 U.S. NATIONAL PARK SERVICE, BUREAU OF LANDS AND FORESTS

NAME OF STRUCTURE  
 ARLINGTON COUNTY ARLINGTON HOUSE

VIRGINIA

SURVEY NO.  
 VA-413

HISTORIC AMERICAN  
 BUILDINGS SURVEY  
 SURV. 15 OF 16 SHEETS

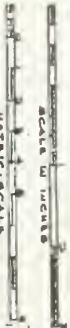
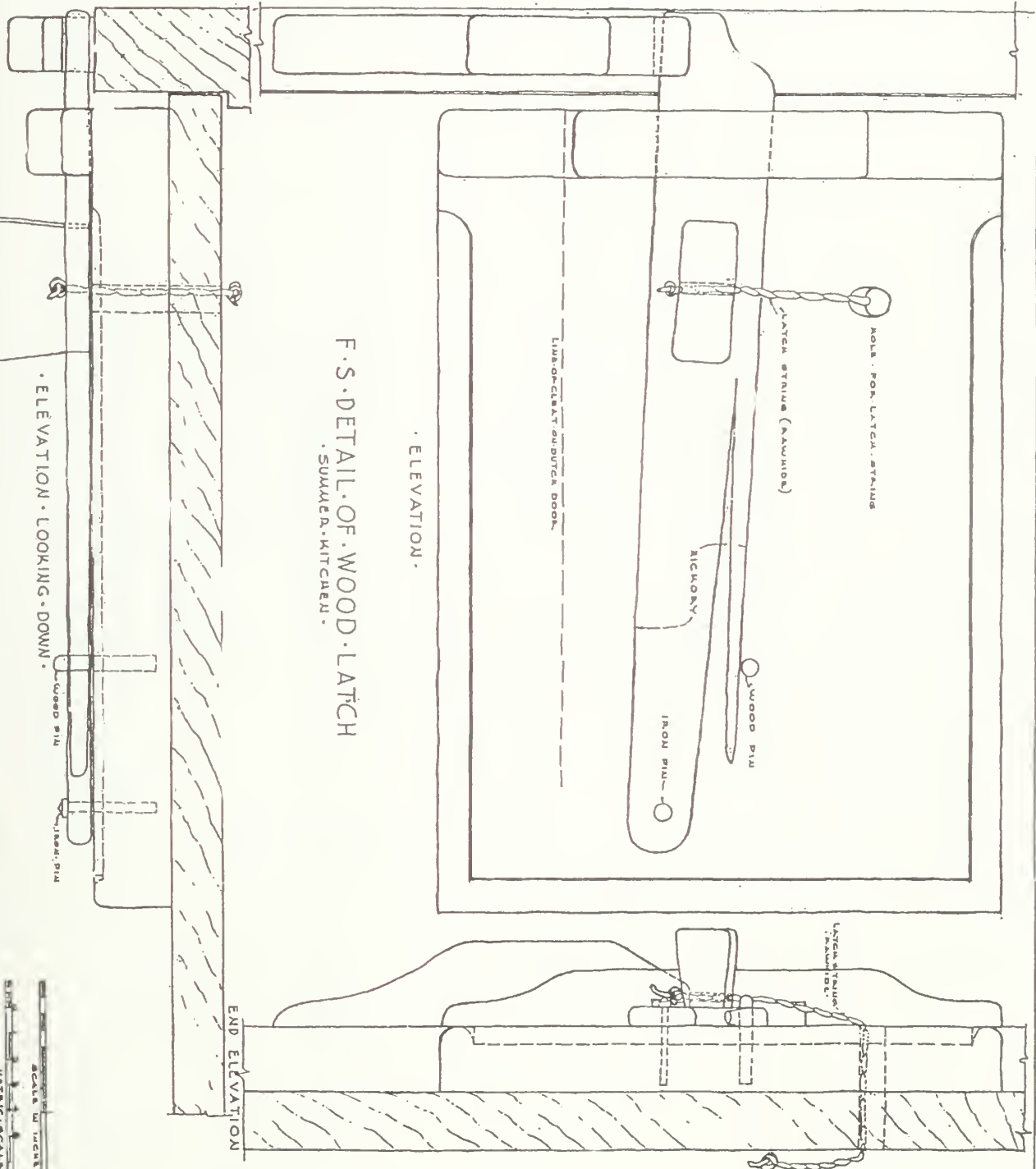
DATE OF RECORD  
 1935

F.S. DETAIL OF WOOD LATCH  
 SUMMER KITCHEN

ELEVATION

ELEVATION - LOOKING DOWN

END ELEVATION





[illegible]

A perspective drawing of a small, square, classical-style building. It features a pediment supported by four columns. The building is shown from a low angle, emphasizing its height. The drawing is labeled "The Gate" at the bottom.

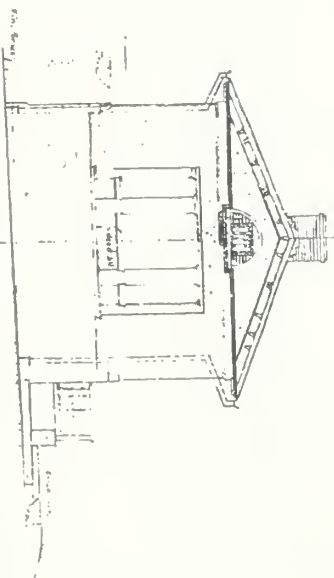
Architectural floor plan of the kitchen area. The plan shows a rectangular room with various fixtures and dimensions. Key features include:

- Dimensions:** The overall dimensions are 7'-0" wide by 10'-0" deep.
- Fixtures:** There are two sinks, a stove, a refrigerator, and a range hood.
- Labels:** "Kitchen floor" is written at the bottom left. "Range hood" is written near the top right. "Sink" is written near the bottom right. "Stove" is written near the bottom left. "Refrigerator" is written near the top left.
- Other markings:** There are several small numbers and lines indicating specific measurements and locations.

SOUTH ELEVATION

-PRESENT NORTH BUILDING

SHOWING EX. 271.6 COMBITION AS OF JULY 1955

WEST FLORIDA

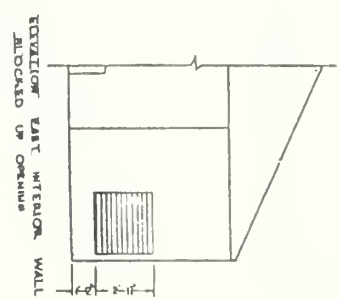
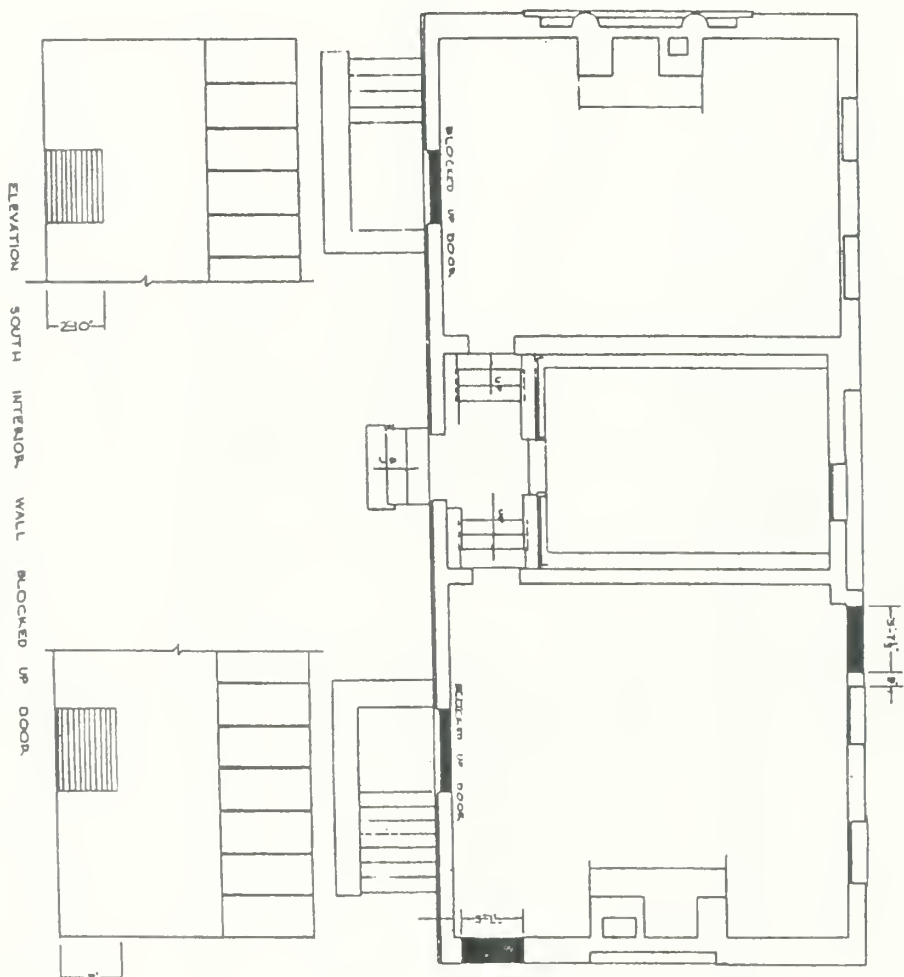
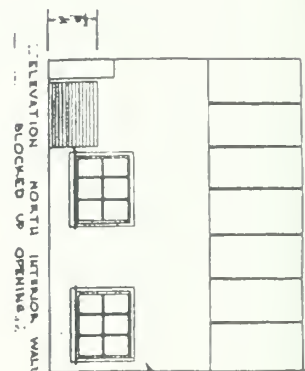
ELEVATIONS - Meters above sea level

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE NATIONAL CANYON, VALLEY DIVISION OF DESIGN & CONSTRUCTION IN CHARGE	N.C.D. N.C.P. N.C.B. N.C.E. N.C.F.
---	--





PHYSICAL EVIDENCE UNCOVERED IN 1964  
COURT-LIFE NORTH OUTBUILDING



SCALE: 1/4" = 1'

RENDERING BY: MARILYN D. HOKLITZ 1964

UNDER SUPERVISION OF THE NATIONAL PARK SERVICE,  
UNITED STATES DEPARTMENT OF THE INTERIOR

UPPER FLOOR

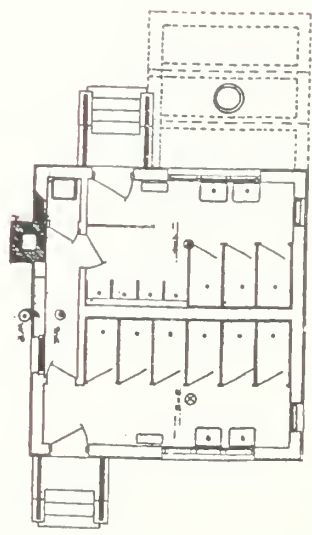
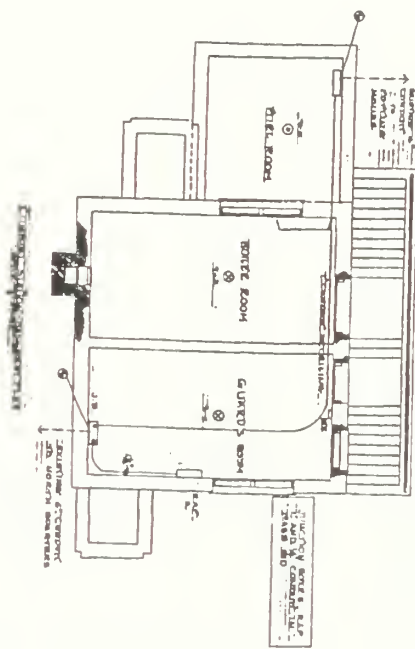
ARLINGTON HOUSE

REAR AND LOCATION OF PHOTOGRAPH

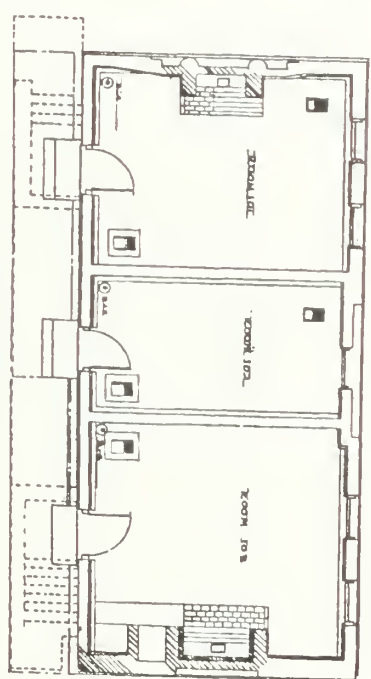
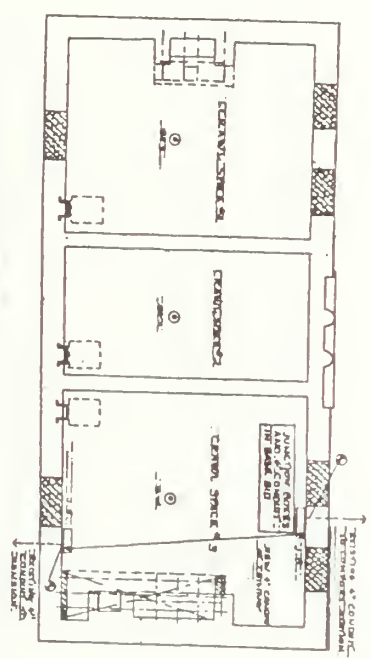
PROPERTY NO.

HISTORIC AMERICAN  
BUILDINGS SURVEY  
SHEET 1 OF 1 SHEETS





# COMFORT STATION 2ND FLOOR



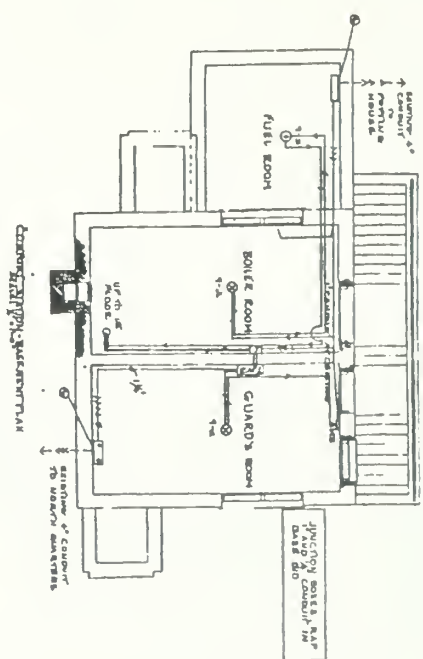
NORTH SLAVE QUARTERS - GARRISON LEVEL, 1ST FLOOR

NORTH SLAVE QUARTERS - 2ND FLOOR

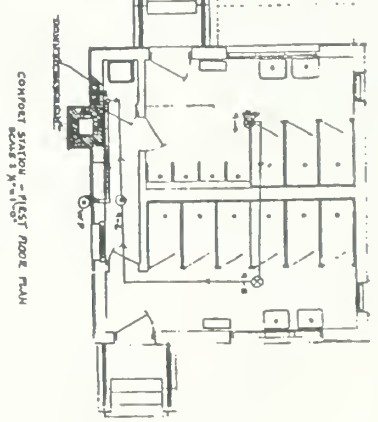
# NORTH QUARTERS



<p>OPERATION OF THE PRISON NORTH SLAVE QUARTERS - GARRISON LEVEL, 1ST FLOOR</p>	<p>LOCATION 100-1000</p>
<p>DEVELOPMENT HOUSE - 1ST FLOOR DEVELOPMENT HOUSE - 2ND FLOOR</p>	<p>DATE 1977</p>
<p>DEVELOPMENT HOUSE - 3RD FLOOR DEVELOPMENT HOUSE - 4TH FLOOR</p>	<p>DATE 1977</p>

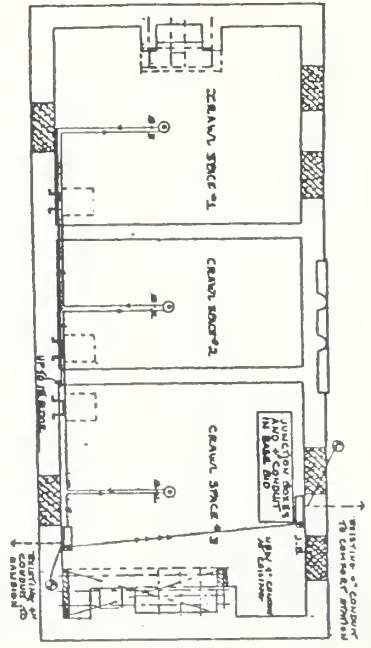


NORTH SLAVE QUARTERS - READING LEVEL FLOOR PLAN  
SCALE: 1/8" = 1'-0"

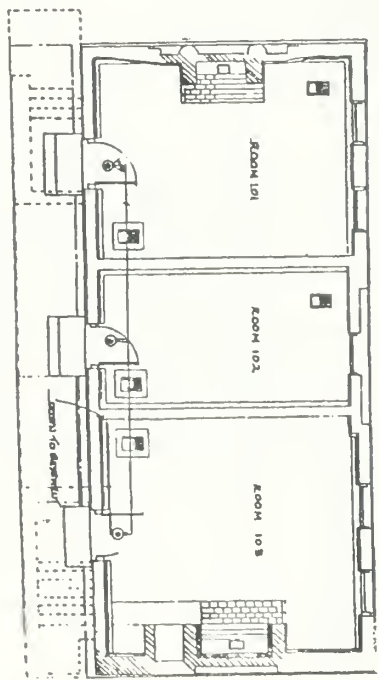


COMFORT STATION - FIRST FLOOR PLAN  
SCALE: 1/8" = 1'-0"

# COMFORT STATION



NORTH SLAVE QUARTERS - READING LEVEL FLOOR PLAN  
SCALE: 1/8" = 1'-0"



NORTH SLAVE QUARTERS - ROSE ROOM  
SCALE: 1/8" = 1'-0"

# NORTH QUARTERS

SCALE: 1/8" = 1'-0"



AS BUILT DRAWING	DATE
DATE	1910
BY	1910
CHECKED	1910
APPROVED	1910
REVISIONS	
1. REVISION	1910
2. REVISION	1910
3. REVISION	1910
4. REVISION	1910
5. REVISION	1910
6. REVISION	1910
7. REVISION	1910
8. REVISION	1910
9. REVISION	1910
10. REVISION	1910

AS BUILT DRAWING

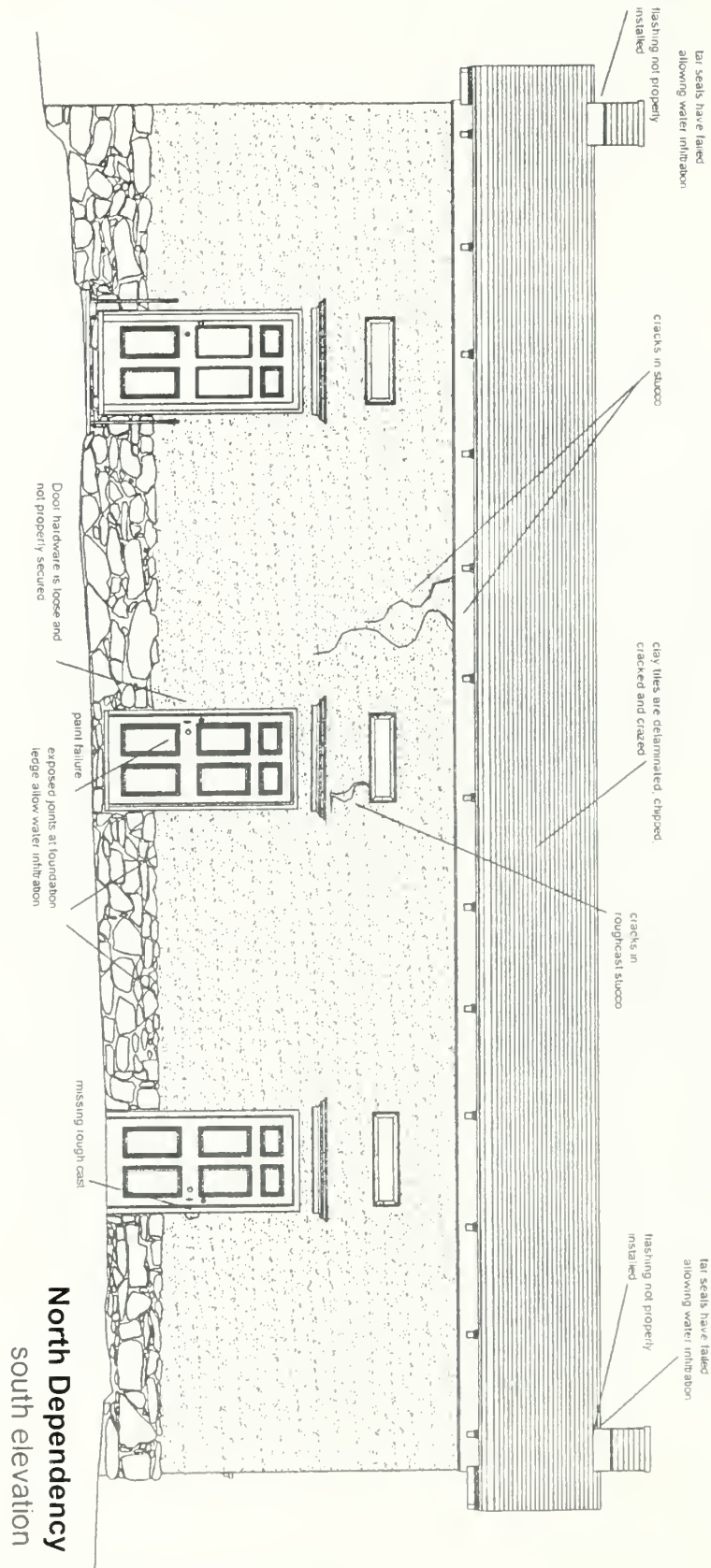


DATE: 1910

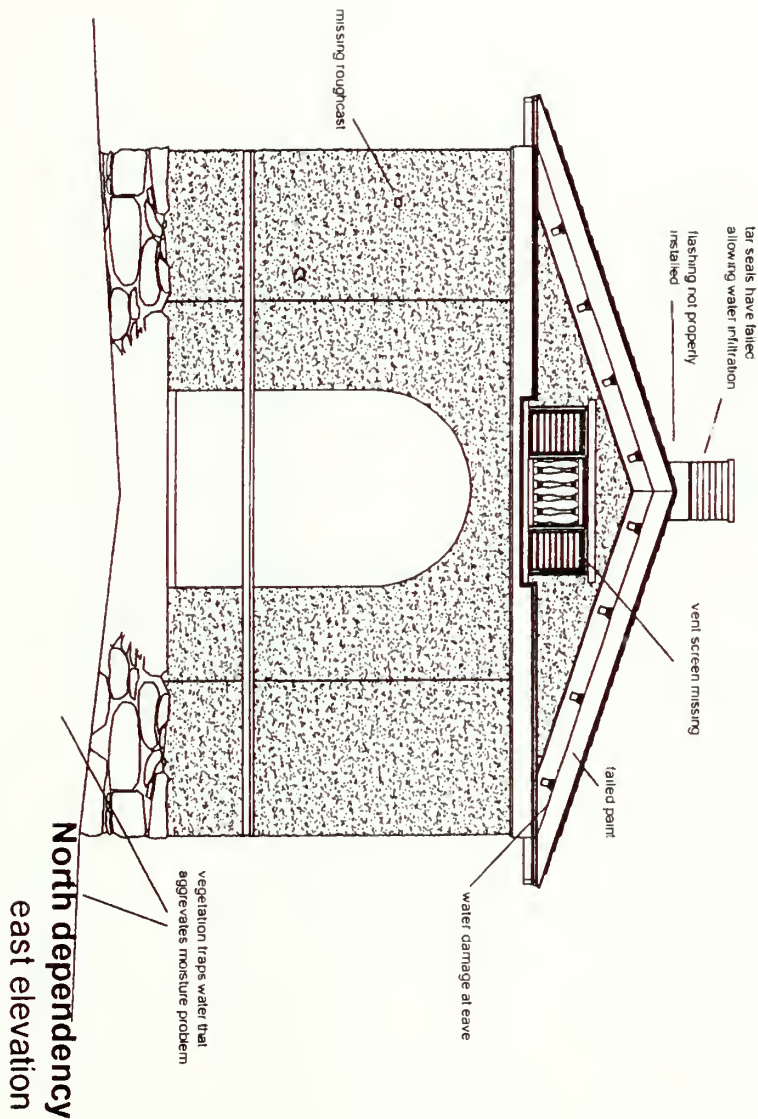
# Appendix C

## *Existing Conditions*



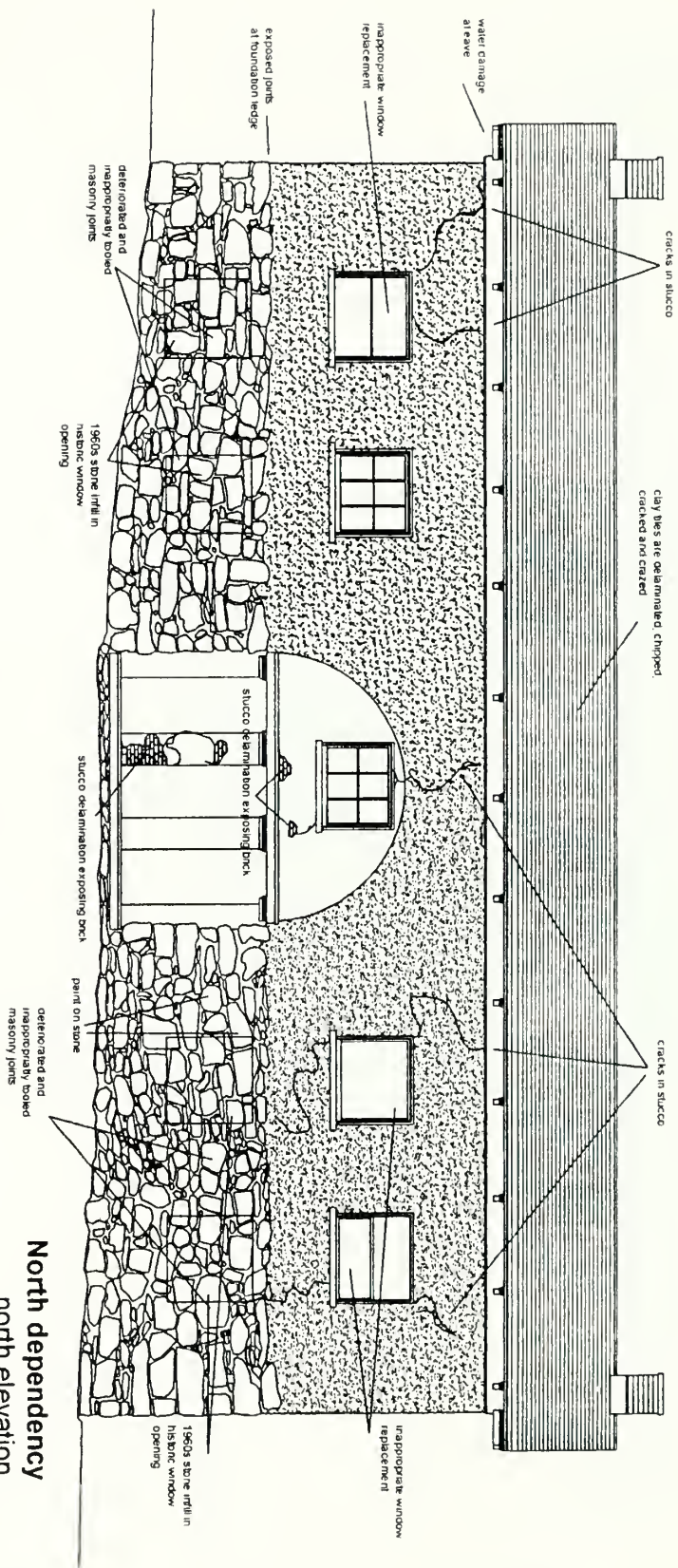


Historic Structure Report  
Arlington House — North Dependency  
The Robert E. Lee Memorial  
Arlington Virginia



Historic Structure Report  
Arlington House — North Dependency  
The Robert E. Lee Memorial  
Arlington Virginia

North dependency  
north elevation

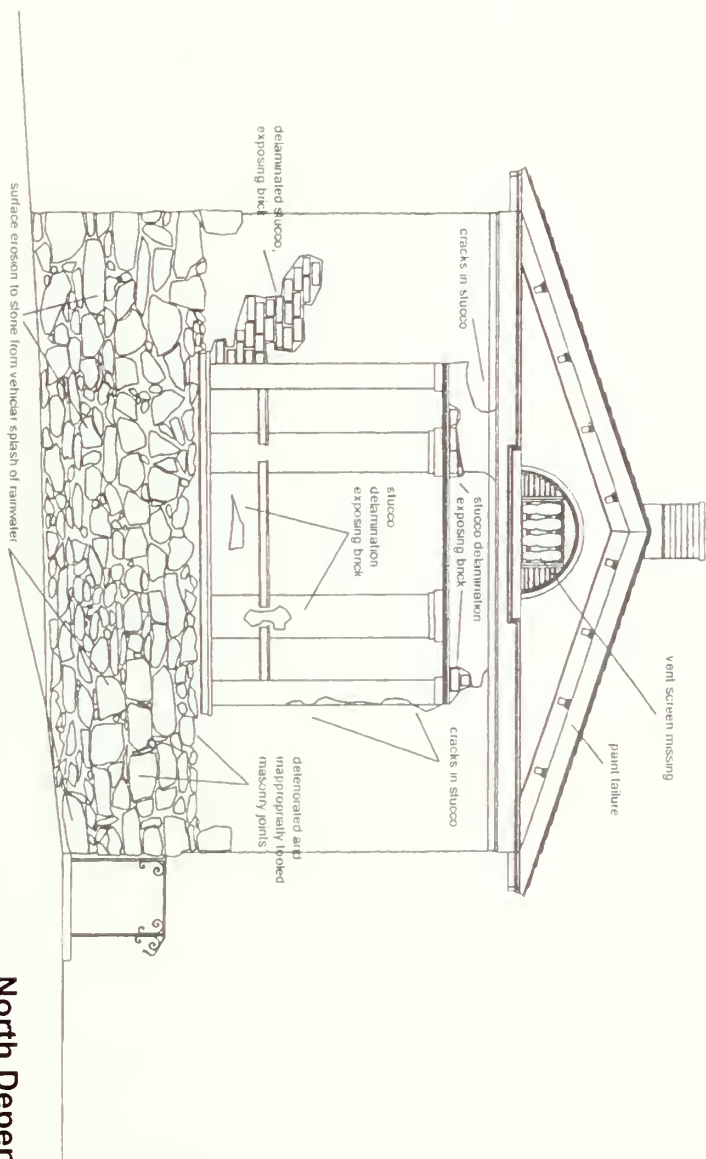




Historic Structure Report  
Arlington House — North Dependency  
The Robert E. Lee Memorial  
Arlington Virginia

Prepared by National Park Service,  
Technical Preservation Services  
C. Fisher, C. Randl and K. Staveteig

**North Dependency**  
west elevation





# Appendix D

## *Material testing*



## MEMORANDUM

TO: Project Manager, Matthew Virta, GWMP Cultural Resource Manager  
Project File, Arlington House Slave Quarters Historic Structures Report  
Physical History and Condition Assessment,  
Arlington House: The Robert E. Lee Memorial  
George Washington Memorial Parkway (GWMP)

FROM: Architectural Historian, Kaaren Staveteig, TPS

SUBJECT: For purposes of testing and analysis, 19 samples, approximately 3" in diameter, were taken from specific locations along the exterior and interior walls of the North dependency building. A schematic plan was provided showing approximate locations of these sampling. Mortar, stucco, rough cast, and some paint samples were evaluated using the facilities at the conservation lab in Lowell, MA under the direction of Peggy Albee, manager of the Historic Architecture Program NER/NPS.

November, 2002

## LOCATION OF SAMPLING - 11/2002

sample	type	location
A-1	mortar	doorjamb, est wall center room
A-3	mortar	above door header, east wall center room
A-5	mortar	ower left hand jamb of infilled door, east wall, center room
A-6	mortar	center room, east wall, 82" from north wall, 24" up from shoulder (original)
A-7	mortar	center room, east wall, mortar deom northernmost pocket
A-9	mortar	east wall of ground level, center room, joist pocket
A-10	mortar	east wall of center room crawl space
A-11	mortar	east wall of center room crawl space
A-12	mortar	north wall, 24" up from grade, 37" west of east wall
B-1	stucco	north elevation within niche
B-2	stucco	east elevation, 75" up from sill and 12" from north corner
C-7	roughcast	southwest corner, south elevation, 17" from west corner immediately below basic

## DESCRIPTION OF SAMPLES - 11/2009

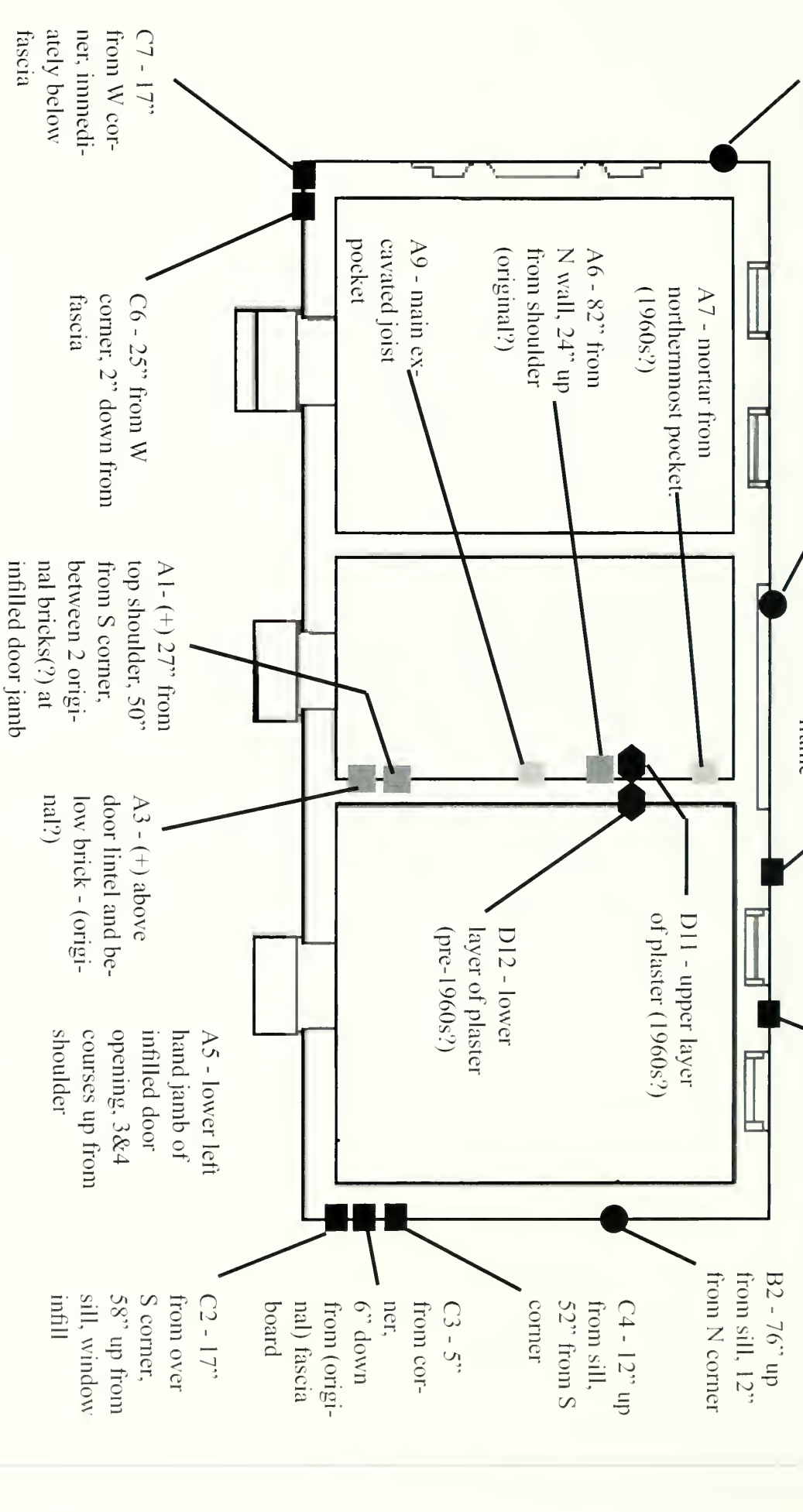
sample	type	description
A-1	mortar	medium hard, brown beige, small white lime incusions well dispersed
A-3	mortar	very soft, brown beige with white lime inclusions
A-5	mortar	very soft, brown beige with white lime inclusions, large
A-6	mortar	soft brown beige with small white lime inclusions, well dispersed, fewer than in A-1, also contains wood fibers
A-7	mortar	hard gray with small white lime inclusions
A-9	mortar	medium soft white matrix with small brown/gray aggregate, some large gray inclusions
A-10	mortar	very soft, brown beige with larhe white lime inculsions, large pebble aggre gate
A-11	mortar	very soft brown beige with large white inclusions, wood fibers
A-12	mortar	very soft beige, large white lime inclusions
B-1	stucco	very soft warm gray small white lime inclusions, brick dust and lime coating (removed)
B-2	stucco	1/4" thick, soft gray over beige, small white lime inclusions; skim coat (off white) yellow then organge lime paint
C-7	roughcast	soft greyish beige, stucco-like small white lime inclusions, orange/tan coat ing on surface, small aggregate; scored on surface

B3 - 24" from N wall,  
2-1/2" from horizontal  
wood member

B1 - 42" above up-  
per sill, 18" from  
right window jamb

C1 - 129" from E round-  
down from fascia, 23"  
to right of window  
frame

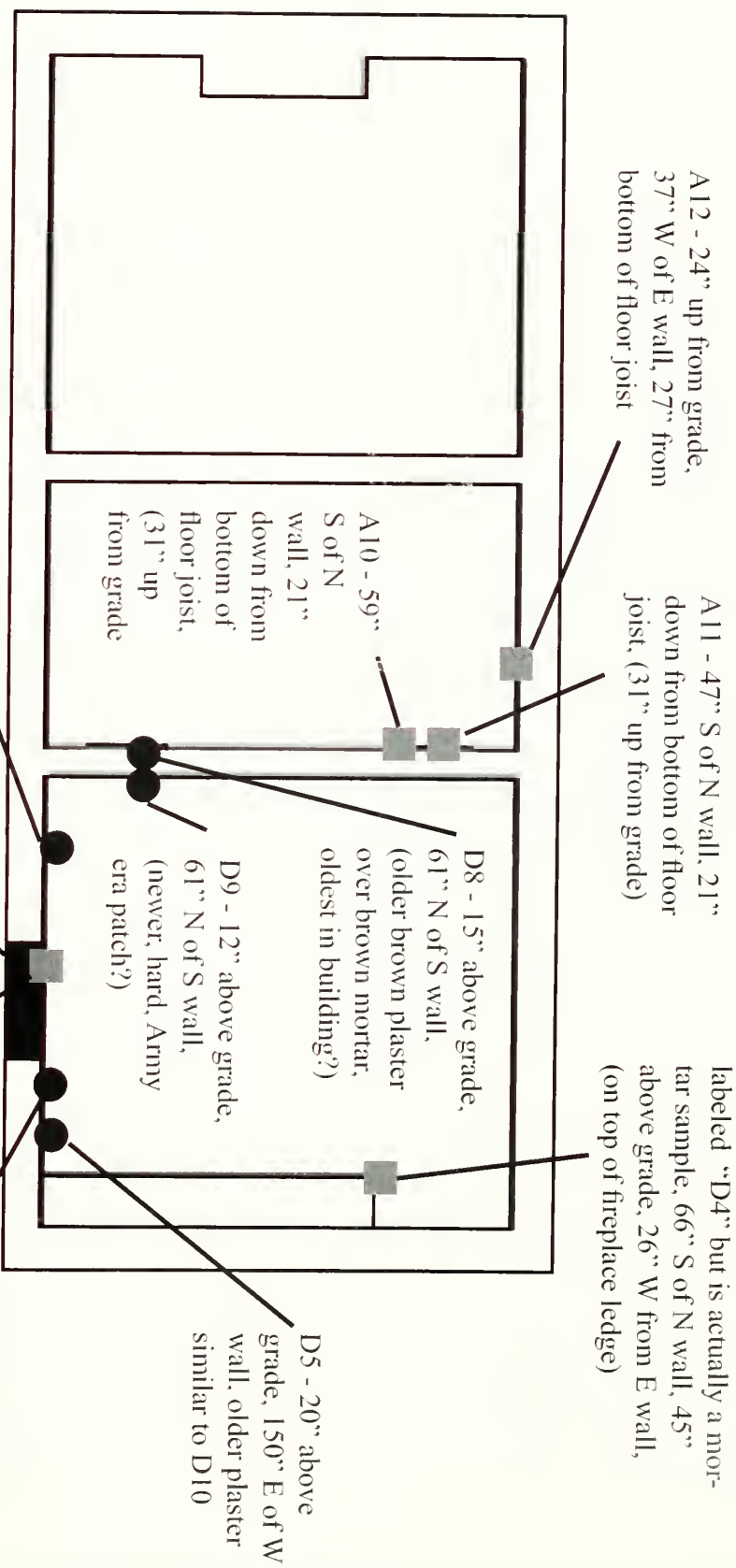
C5 - 129" from E round-  
tion wall, immediately  
below fascia



# North Slave Quarters

- ground level
- mortar sample taken from infilled door opening (4), plaster removal required (A)
- mortar sample taken from joist pockets (6), plaster removal required (A)
- mortar sample taken from undis- turbed wall area behind plaster layers (A)
- rough cast samples (C)
- siliceous samples (B)
- plaster samples (D)





## North Slave Quarters

crawl space level

■ mortar sample (A)

● plaster samples (D)

## MORTAR SAMPLES

parts/volume 11/02

	A-1	A-3	A-5	A-6	A-7	A-9	A-10	A-11	A-12
sand	1	5	7.5	4.5	7	6.5	7.5	7	7
lime	1	1	1.5	1	2.5	2	1.5	1.5	1.5
finer	8	4	1	4.5	0.5	1.5	1	1.5	1.5
cement									
gypsum									
ratio	1/1	5/1	5/1	4.5/1	2.8/1	3.25/1	5/1	4.6/1	4.6/1

## STUCCO/ROUGH CAST

parts /volume - 11/02

	B-1	B-2	C-7
sand	7	8	6
lime	1.5	1-	3
finer	1.5	1+	1
cement			
gypsum			
ratio	4.6/1	8/1	2/1

## PAINT ANALYSIS OF STUCCO

### B-2

Sample is soft and fragile; Lime based coating over lime skim coating—very deteriorated; no dirt layer; yellow immediately applied, then orange—applied later—quite deteriorated.

1<sup>st</sup> layer 10YR 8/6; 2<sup>nd</sup> layer 5YR 6/8

### B-1

Sample is softer than B-2; Out layer flaked; No evidence of skim coat

Brownish orange color, very thick, over coat of tan—may have been a protective coating

1<sup>st</sup> layer 5YR 5/8; 2<sup>nd</sup> layer 7.5YR 7/6

summary:

B2—different from other three—could be alteration or patch

B1—may have originally been 5YR 5/8—see sample from Munsell Book, a most intense color

## ROUGH CAST SAMPLES

C1—1921-1929

C2—window infill, near top (east elevation)

C3—oldest?

C4—window infill, low, dirty (east elevation)

C6—oldest

C7—oldest—soft, grayish beige with small white lime inclusions, orange/tan coating on surface

PORT NO: 19342

CLIENT: Chad Randl – National Park Service  
1849 C Street, NW (2255)  
Washington, DC 20240

DATE RECEIVED: March 31, 2003

DATE REQUIRED: April 1, 2003

REFERENCE: 1849 C Street, NW

SUBJECT: Polarized Light Microscopy Analysis for Asbestos; 1 sample

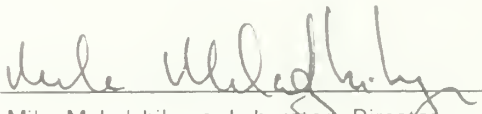
METHODOLOGY: "Method for the Determination of Asbestos in Bulk Building Materials"  
(EPA 600/R-93/116)"

ACCREDITED: National Institute of Standards and Technology (NVLAP) # 200037

SAMPLE ID NUMBER	SAMPLE LOCATION AND DESCRIPTION	VISUAL DESCRIPTION	ASBESTIFORM MINERALS	OTHER FIBROUS MATERIALS	NON-FIBROUS MATERIALS
01	East Room  Plaster wall – 1964	White-gray granular  Non-friable	None Detected	None Detected	Granular Minerals Perlite Gypsum

t: Trace >1% = greater than 1% <1 = less than 1%

  
Optical Microscopist

  
Mike Maladzhikyan, Laboratory Director

\*The EPA method is a semiquantitative procedure. The detection limit is between 1/10 to 1 percent by area and is dependent upon the size of the asbestos fibers, the means of sampling and the matrix of the sampled material.  
The test results reported are for the sample or samples delivered to us and may not represent the entire material from which the sample was taken.  
The EPA recommends three samples or more be taken for a "homogenous sampling area" before friable material is considered non-asbestos-containing.  
All bulk samples are disposed of after six months, unless specified otherwise by the client.  
This report from a NVLAP accredited laboratory must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.



United States Department of Commerce  
National Institute of Standards and Technology



ISO/IEC 17025:1999  
ISO 9002:1994

Certificate of Accreditation

WESTERN ANALYTICAL LABORATORY, INC.  
ARLINGTON, CA

is recognized by the National Voluntary Accreditation Program  
for satisfactory compliance with criteria set forth in NIST Handbook 150:2001,  
all requirements of ISO/IEC 17025:1999, and relevant requirements of ISO 9002:1994  
Accreditation is awarded for specific services, listed on the Scope of Accreditation, for

**BULK ASBESTOS FIBER ANALYSIS**

March 31, 2004

Effective through

A handwritten signature in cursive script, appearing to read "C. D. Hansen".

For the National Institute of Standards and Technology  
NVL AP Lab Code: 200037-0








# Appendix E

## *Field Notes*

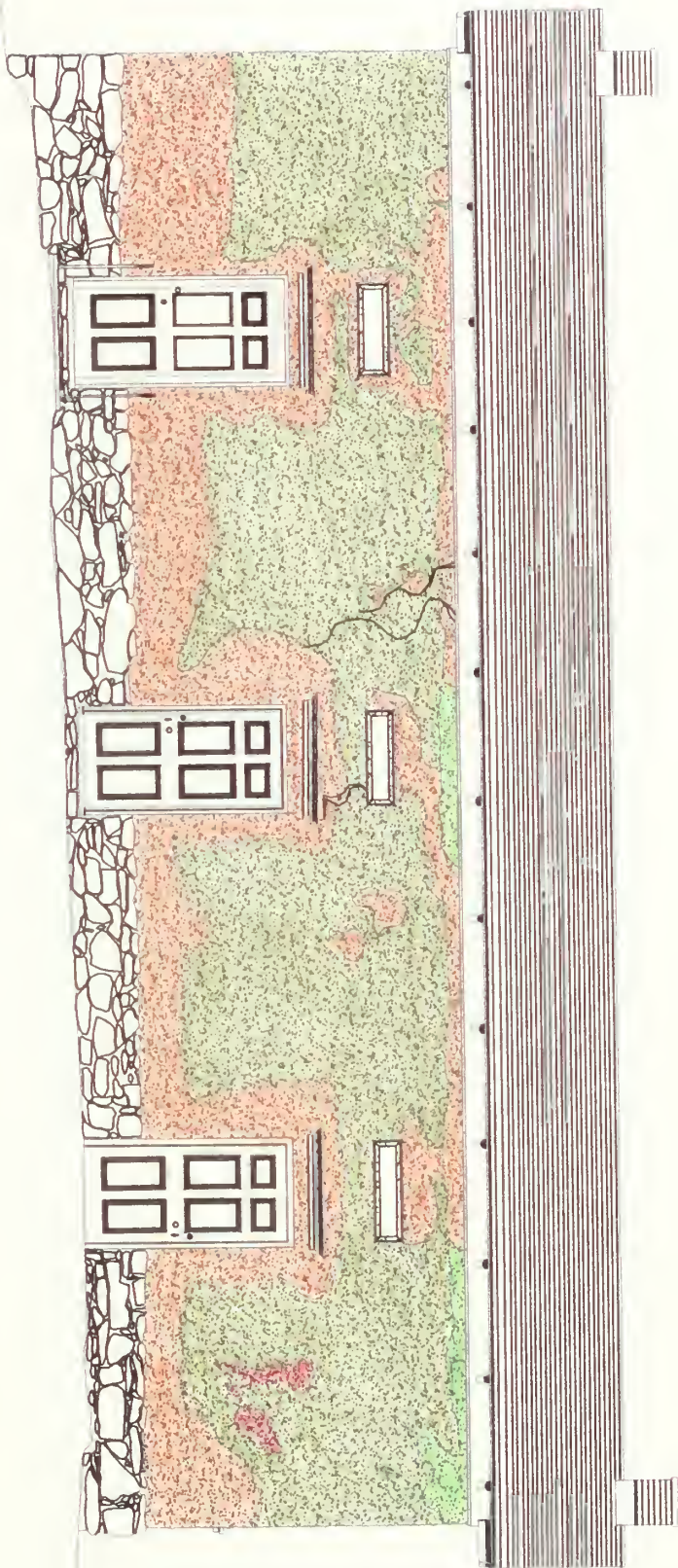
### *1. Exterior Finishes*

---

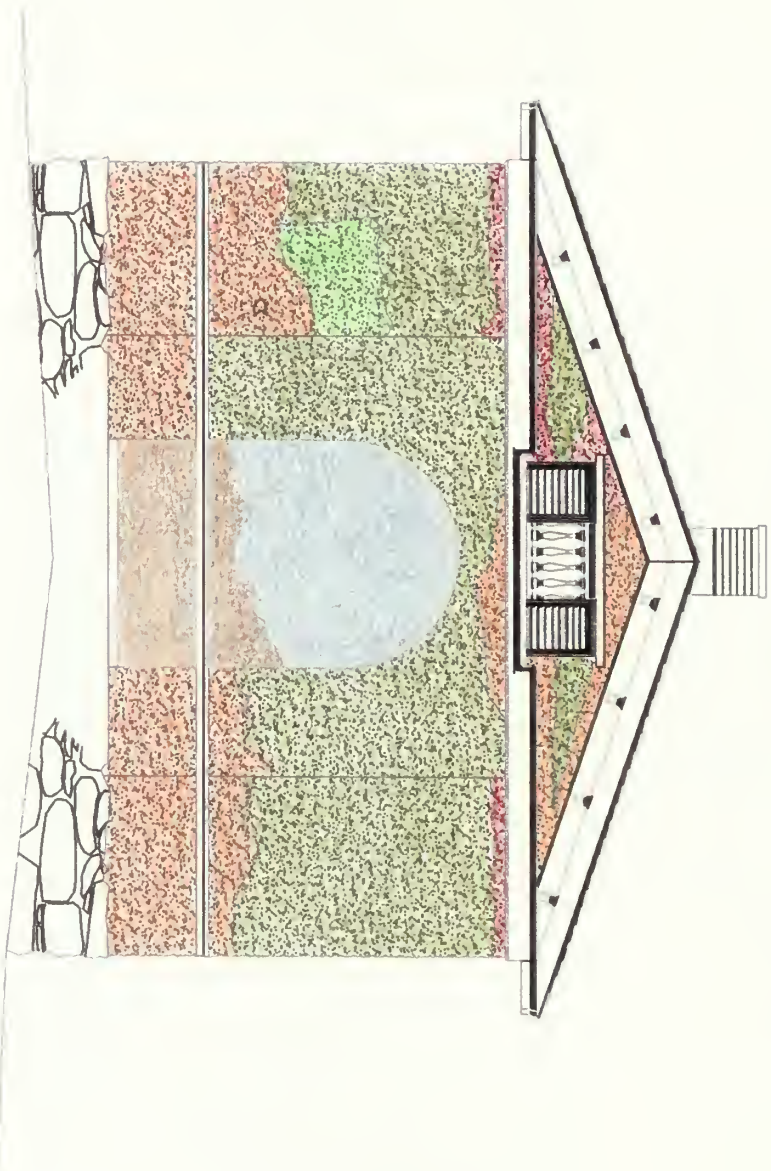
### Stucco on the North Dependency, color key:

-  oldest roughcast (yellowish/beige body with small to medium aggregate)
  -  Army restoration roughcast (darker brown render with medium aggregate)
  -  NPS restoration roughcast (medium brown matrix with medium aggregate)
  -  roughcast (grey matrix, high content of portland cement)
- 
-  oldest smooth (soft, light beige matrix with small pieces of lime shells and tiny stones)
  -  Army restoration smooth
  -  NPS restoration smooth (soft, light beige matrix with small pieces of lime and tiny stones, less aggregate than earliest stucco)





North Dependency  
south elevation



**North Dependency**  
east elevation



Prepared by National Park Service,  
Technical Preservation Services  
C. Fisher, C. Randl and K. Staveteig





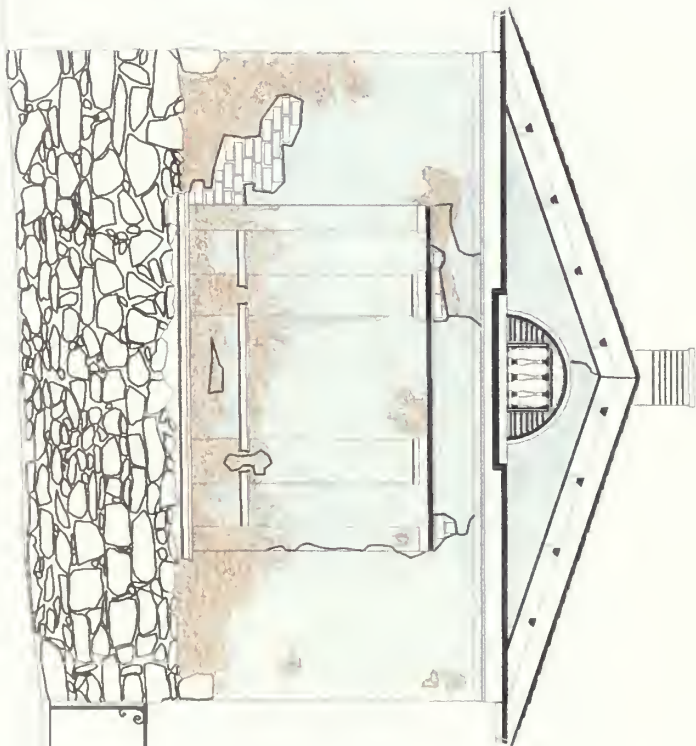
North Dependency  
north elevation

Historic Structure Report  
**Arlington House — North Dependency**  
**The Robert E. Lee Memorial**  
 Arlington Virginia

Prepared by National Park Service,  
 Technical Preservation Services  
 C. Fisher, C. Randl and K. Staveteig

Field  
 Notes  
 2003





**North Dependency**  
west elevation



Prepared by National Park Service,  
Technical Preservation Services  
C. Fisher, C. Randl and K. Staveteig

Historic Structure Report  
**Arlington House — North Dependency**  
**The Robert E. Lee Memorial**  
Arlington Virginia

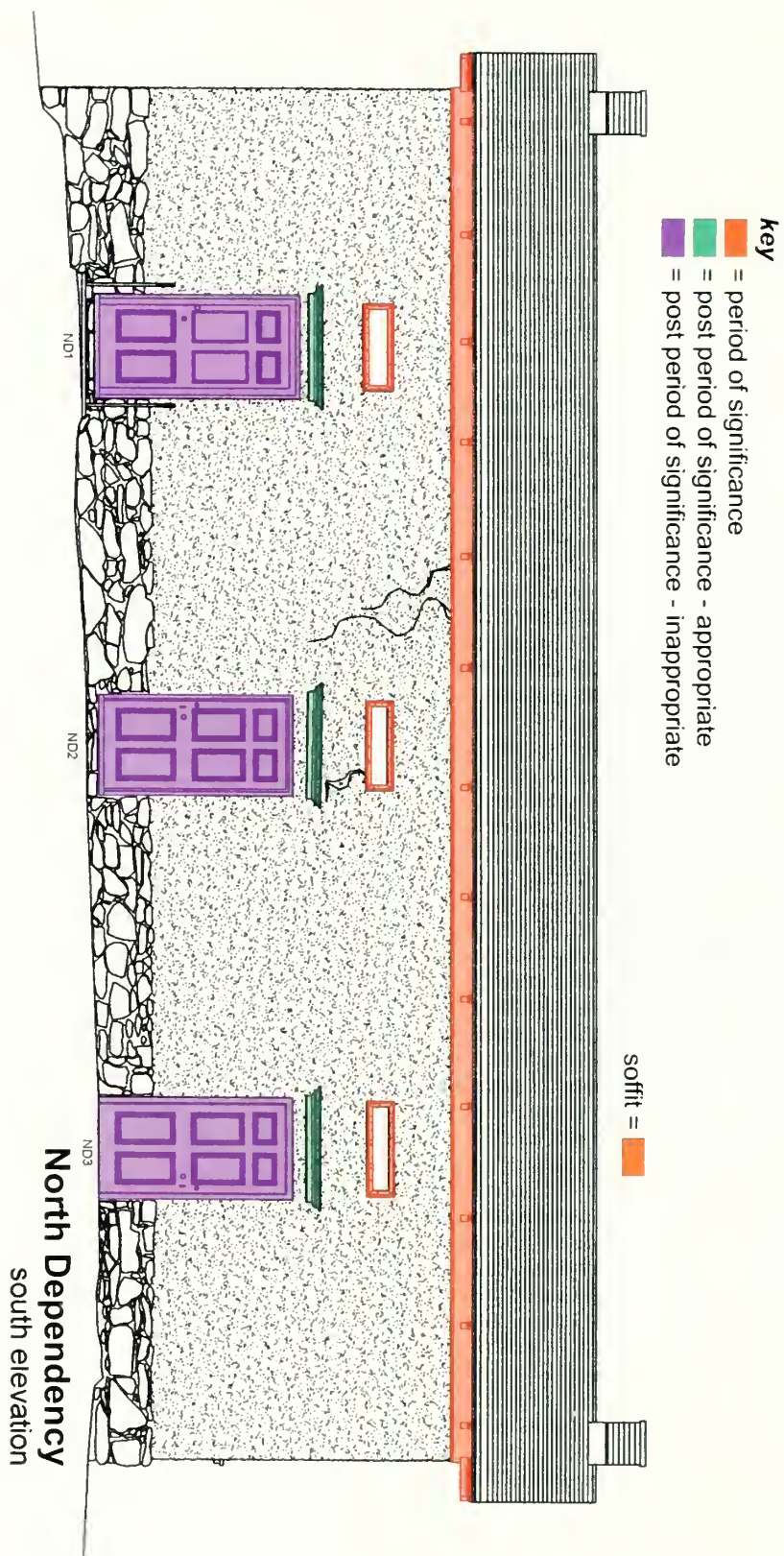
**Notes**  
**2003**

# Appendix E

## *Field Notes*

### *2. Exterior Woodwork*

---

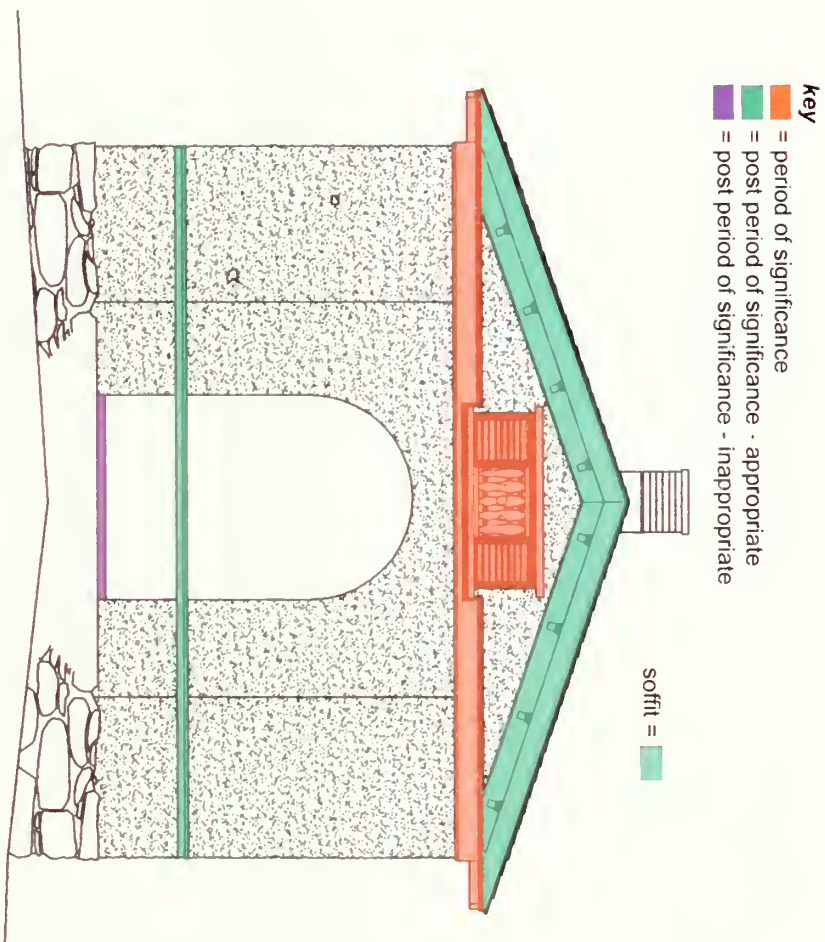




Historic Structure Report  
Arlington House — North Dependency  
The Robert E. Lee Memorial  
Arlington Virginia

Prepared by National Park Service,  
Technical Preservation Services  
C. Fisher, C. Randl and K. Staveteig

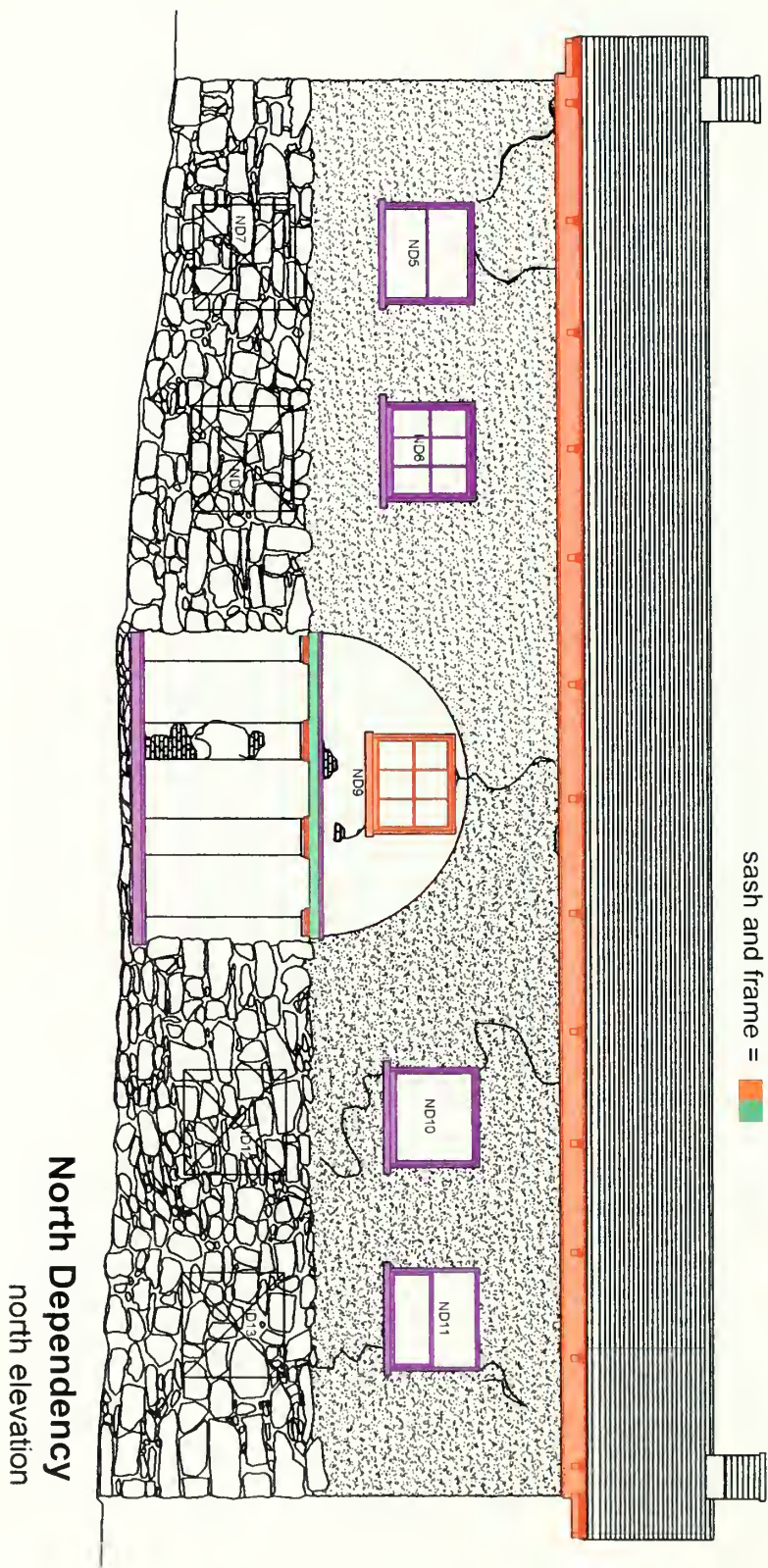
North Dependency  
east elevation



**key**  
 = period of significance  
 = post period of significance - appropriate  
 = post period of significance - inappropriate

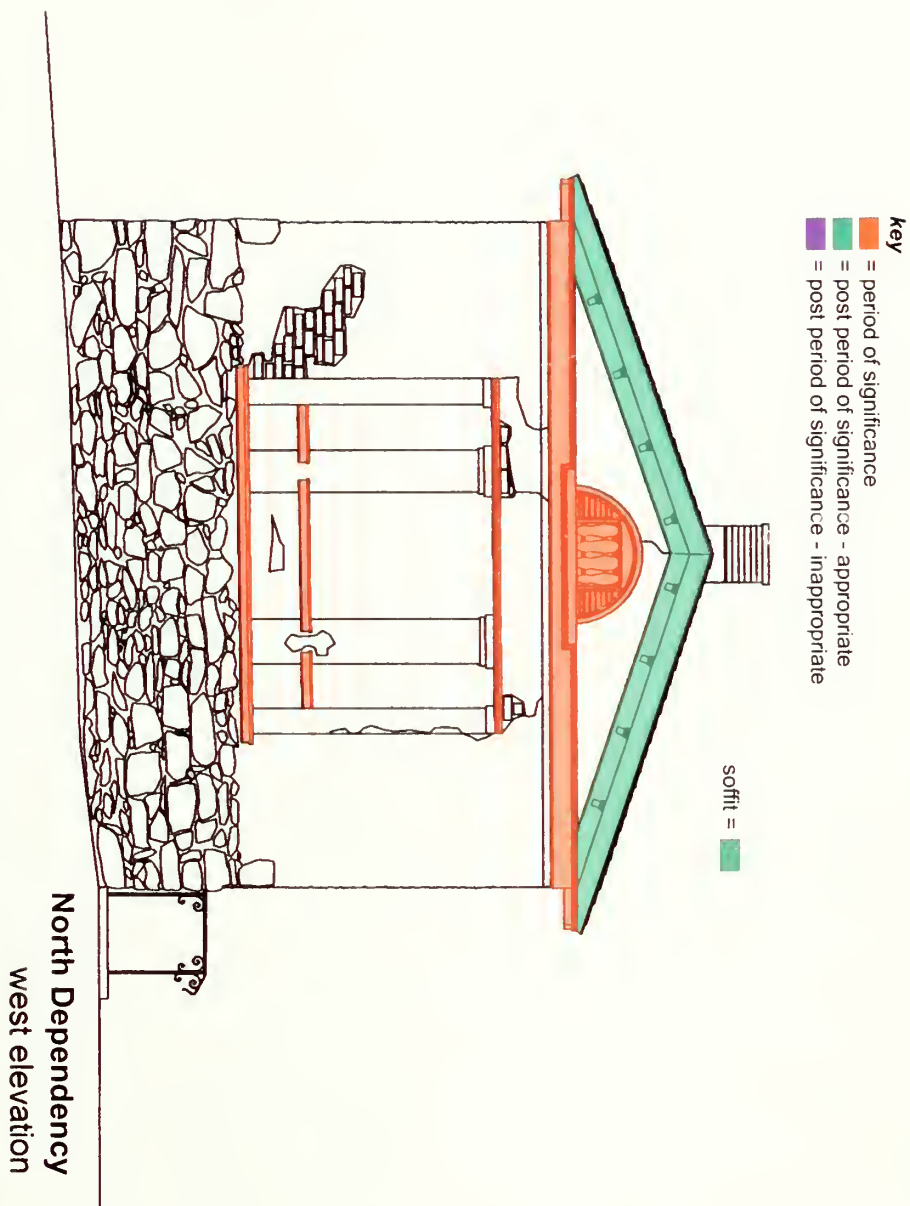
sash and frame =

soffit =



Historic Structure Report  
 Arlington House — North Dependency  
 The Robert E. Lee Memorial  
 Arlington Virginia

Prepared by National Park Service,  
 Technical Preservation Services  
 C. Fisher, C. Randl and K. Staveteig







# Appendix E

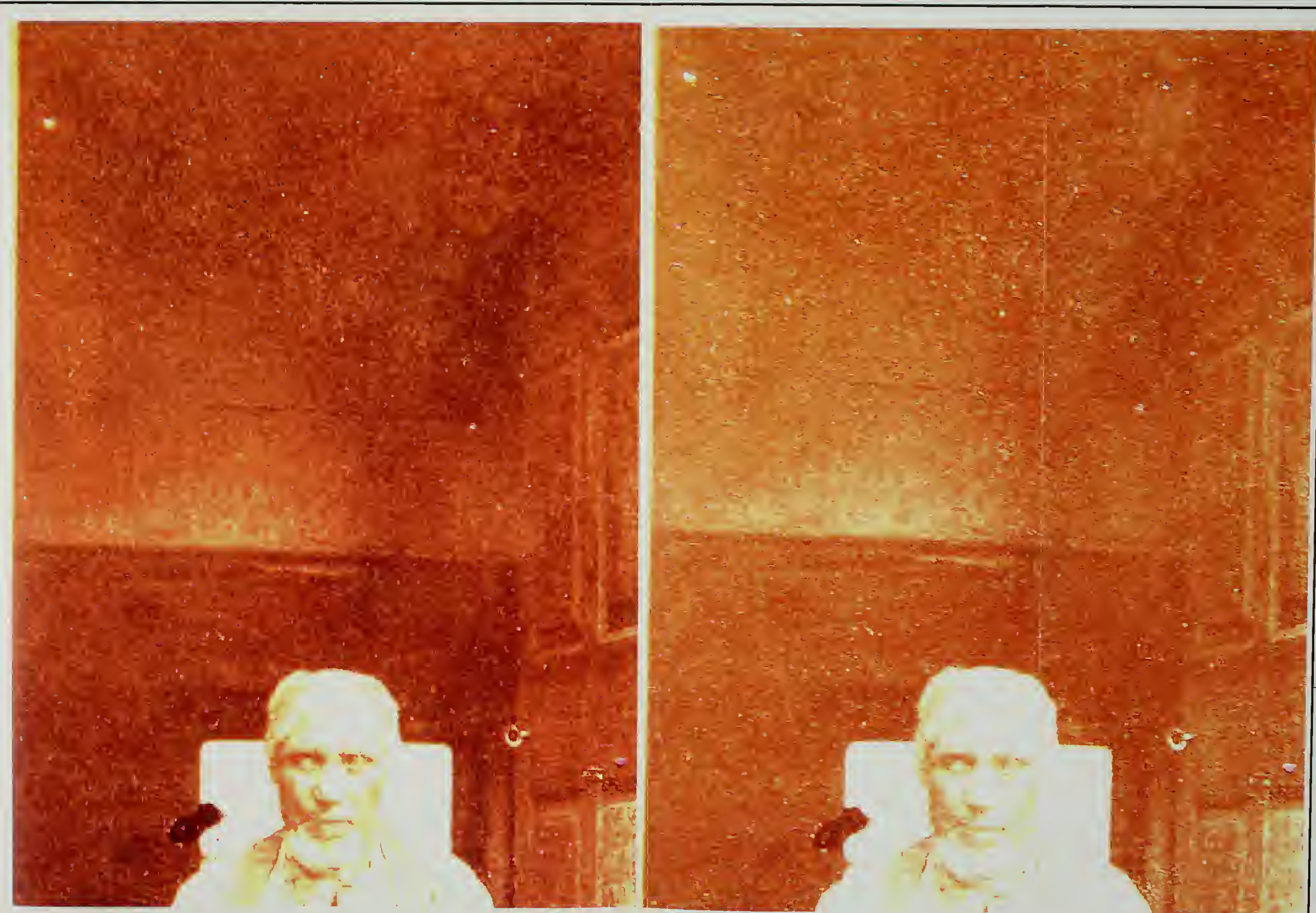
## *Field Notes*

### *3. Architectural and Finishes Survey*

---







North Dependency, 1865 Historic Photograph of South Elevation Kitchen Entry.  
Enlargements of the interior details shown with increased contrast.



- ← Pebble dash finish
- ← Beaded architrave
- ← Nails attaching beaded-edge architrave
- ← Muntin bar on north window
- ← Mullion bar in north window
- ← Cast iron hinge
- ← Step-down or steps beyond threshold

North Dependency, 1865 Historic Photograph of South Elevation Kitchen Entry.



- ← Wide, horizontal board with beaded bottom edge
- ← Broken edge of plaster ceiling over kitchen
- ← Plaster return at north window

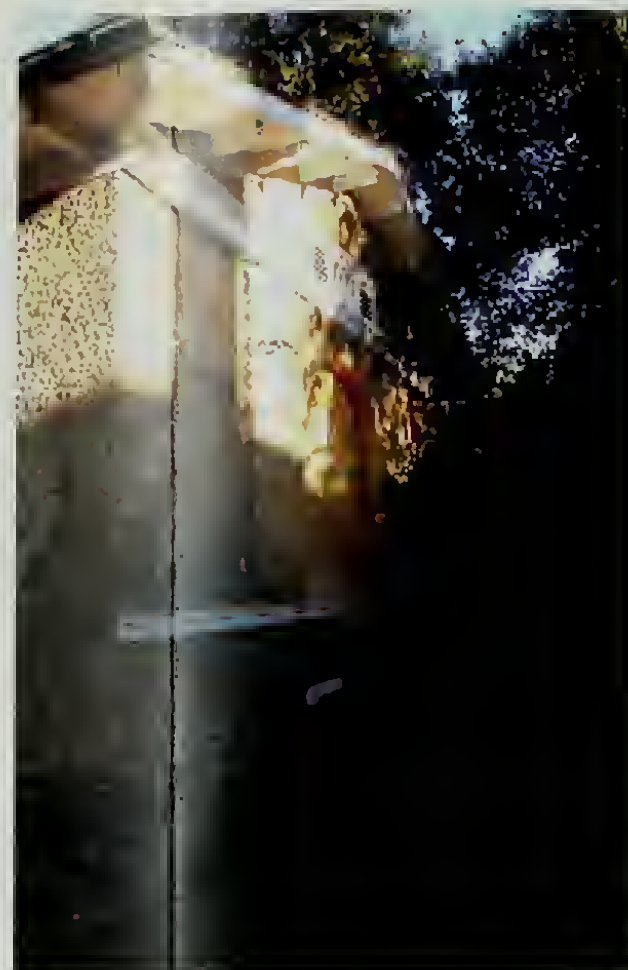
A lighter exposure of the 1865 photograph reveals additional details of the dark interior.

Several architectural details of the North Dependency are visible in the 1865 photograph. What is reasonably clear is the pebble-dash finish on the exterior masonry, an applied beaded-edge door surround, a molded back band on the door surround (added after the South dependency construction), the door-side leaf of the cast iron knuckle hinge on the edge of the door, the raised panels and molded stiles and rails of the door, the 'D' ring brass handle of the door lock, a wide board with a beaded bottom edge covering the 'bulkhead,' the broken edge of the kitchen's plaster ceiling, the step-down past the threshold, and the plaster return to the window on the north wall. What is not readily visible is a line of vertical boards covering the 'bulkhead,' though there may be a suggestion of horizontal lines in this area. There is a line on the interior south wall to the east of the door for what appears to be a plank wall. There are several not-quite-visible features that can be suggested to be many things, but should not be assumed to be evidence if not readily visible. Some of the 'patterns' are part of the photograph, not of the image. The next sheet contains enlargements of the interior details.





North Dependency, South Elevation



North Dependency, East Elevation



North Dependency, West Elevation

The north dependency is the older of the two structures, as revealed by the investigation of the exterior architectural details and the chronology of finishes. The south, north and east elevations were initially finished with a pebble-dash stucco and painted white. The west elevation was treated as a minor feature; the brickwork was left exposed and washed with the same color as applied to the stuccoed elevations. At a later date, possibly when the south dependency was constructed, the west elevation was stuccoed with a smooth, natural cement stucco.

The early colors applied to the woodwork are medium-to-dark tans, red-tans and brown. These appear to be similar to the colors applied to the principal residence, but only a direct comparison of layers can reveal whether the dependencies were intended to match the residence. One feature of the color schemes of the two dependencies is that the early color schemes of the south dependency did not match those of the north dependency, as revealed in the micrographs. The white, sanded paint applied at the south dependency does not appear in chronology of the north building.

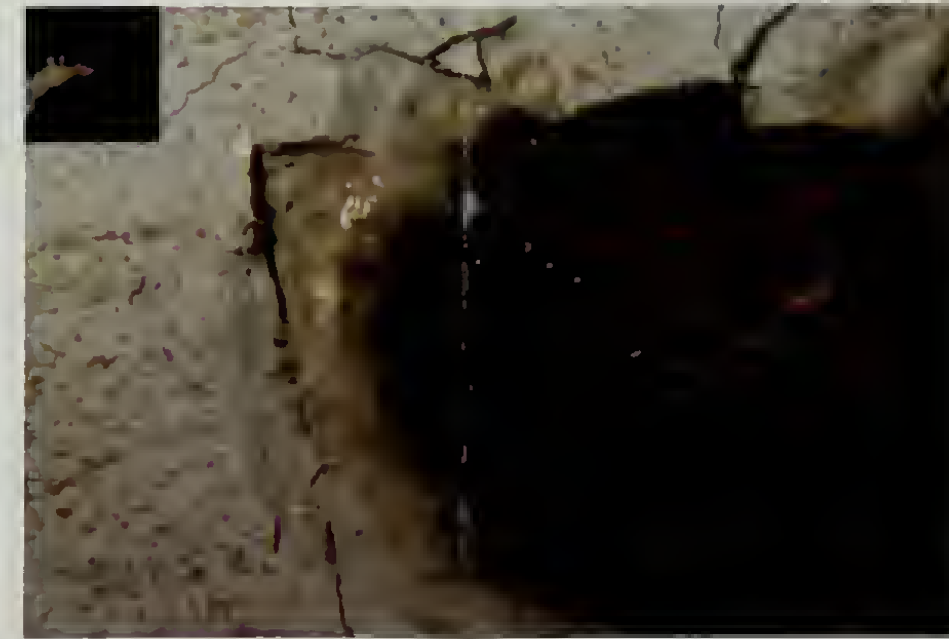
Neither were the details of the south dependency copied from the north. The appearance of the two buildings was later unified by the addition of a molding that was applied to the sides of the outriggers and cornice, around the architraves as a back band, and to selected capitals, sills and vents. This molding can be seen as a door architrave back band in the 1865 photograph of the kitchen door.



North Dependency, detail of 1865 photograph of molded back band



North Dependency, micrograph of finishes on pebble-dash stucco



North Dependency, micrograph of finishes on north elevation cornice outrigger





Top of lower room's west wall and the finish level of the plaster ceiling

North Dependency, East Room: The location of the lower kitchen's ceiling is preserved as a line of plaster and finishes on the west elevation.



Finish ceiling level in lower room. Note that the ceiling location is indicated by an accumulation of fibers and debris that may date to the early occupancy of the dependency.

North Dependency, East Room: The location of the lower kitchen's ceiling is preserved as a line of plaster and debris on the north elevation, east window.



Finish floor level in upper room. Note that there was no baseboard in this location and that the wall finishes extended down to the floor. The last finish applied to this surface was a distemper rose color.

North Dependency, East Room: The location of the upper room's floor level is preserved as a line of plaster and finishes on the south elevation.



North Dependency, East Room: The location of the upper room's floor level is preserved as a line of plaster and finishes on the south elevation.



The dark line on the masonry was produced by a one-inch wide plank wall separating the upper room from the south entry. The millwork was installed before the wall plaster and finishes were installed. The dark line was produced by air-borne soiling of the surface behind the wall.



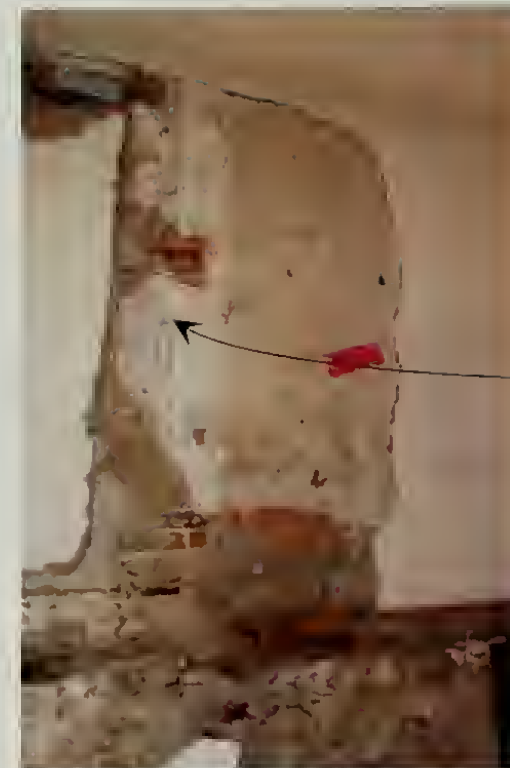
North Dependency, East Room: Small remnants of the plaster finishes survive beneath the later cement plaster. This example was found on the east elevation at the upper room level to the north of the hearth. Its surface area is less than one inch across. The first finish was a brush applied whitewash. The last finish applied to the walls was a yellow distemper paint.





Plank wall location. The wall was installed before the plaster was applied to the walls, and later removed. The patching plaster appears to be a lime-sand mix with a lime wash finish.

North Dependency, Center Room: The location of a plank wall is indicated by a one-inch wide vertical patch in the plaster on the east elevation adjacent to the door. The door opening is original, as indicated by the coursing of the masonry.



Plank wall location. The wall was installed before the plaster was applied to the walls, and later removed. The patching plaster appears to be a lime-sand mix with a lime wash finish.

North Dependency, Center Room: The west door masonry opening is not as intact and accessible as the east door. The engagement line for a plank wall corresponding to the wall at the east door is located to the north of the opening. This area is partially visible in an 1865 general view of the yard and north dependency. The plank wall is visible through the open exterior door.



North Dependency, Center Room: The north elevation contains evidence of a large repair or possibly the addition of the exterior arch and window. Distemper finishes found in the undisturbed lower area of the wall suggest that this room had a similar paint history as the upper east room. The general location of the floor level is indicated by a gradual reduction in the plaster thickness. The floor line is not as distinguished as that documented in the east room, but this is due to the quality of the surviving evidence.



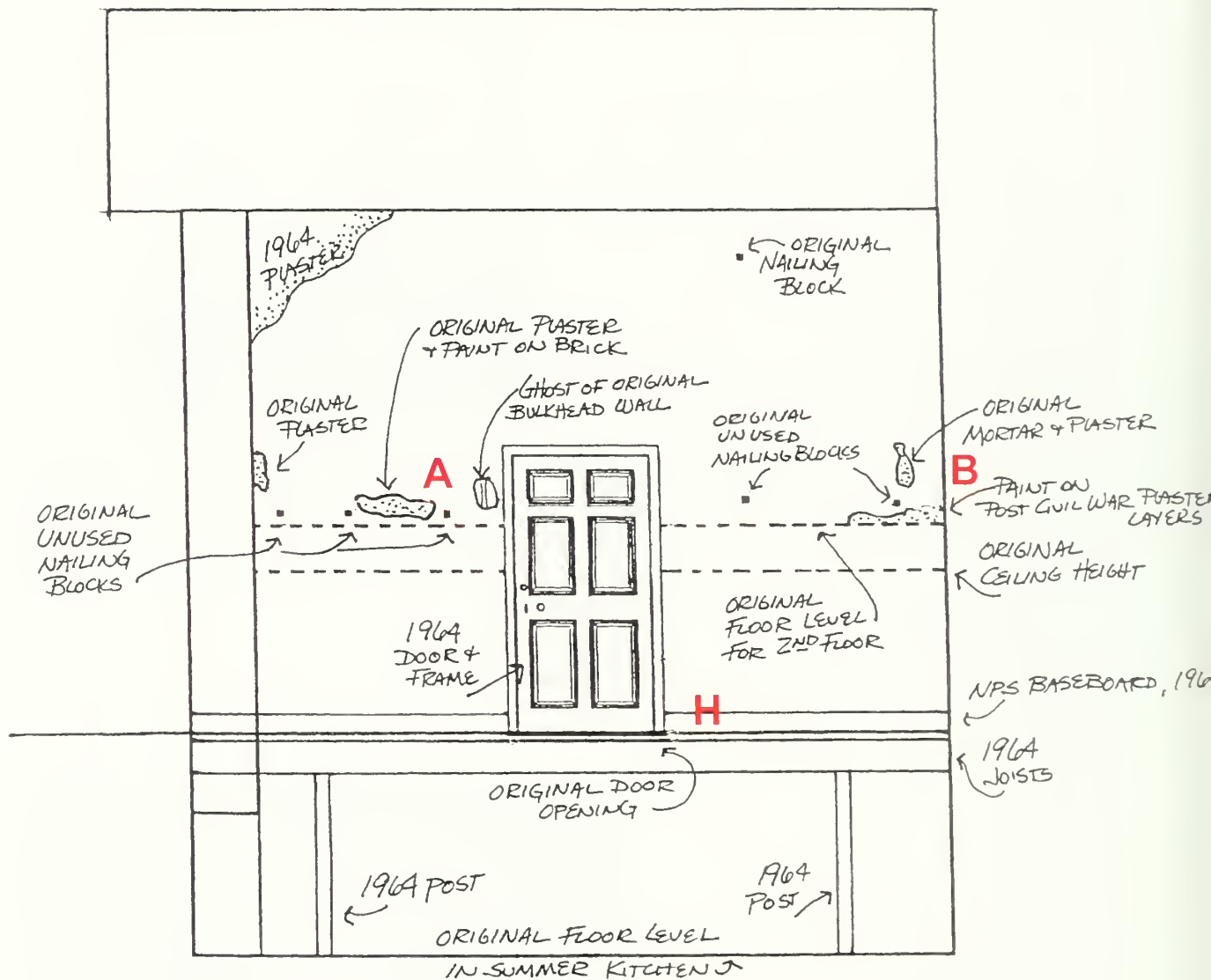
North Dependency, Center Room: This micrograph is of a single remnant of the plaster finishes found on the north elevation. There distemper layers survive; a white wash, a light yellow, and the same medium yellow as found in the east room.



# Appendix E

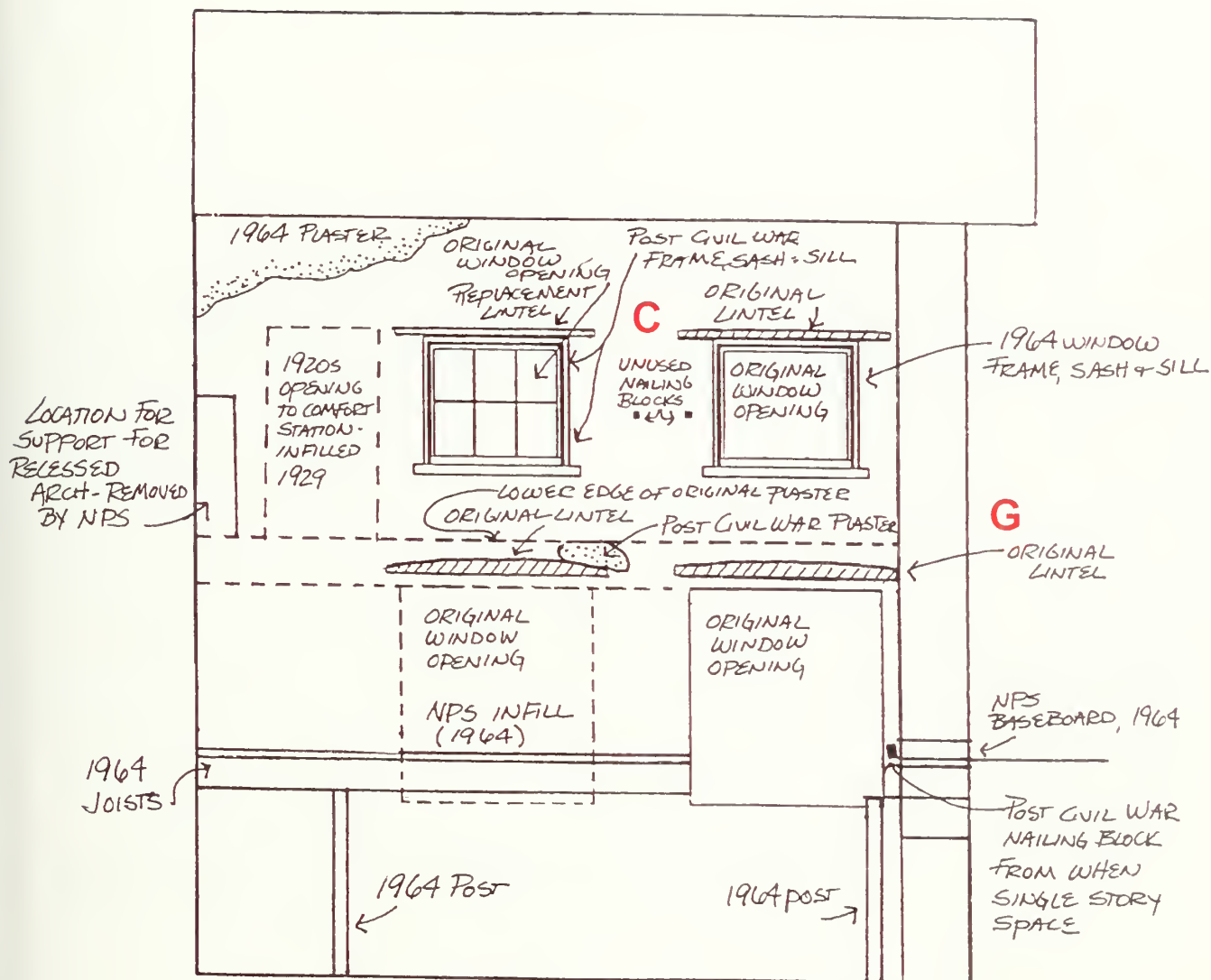
## *Field Notes*

### *4. Interior Notes*



**North Dependency, east room, south elevation**

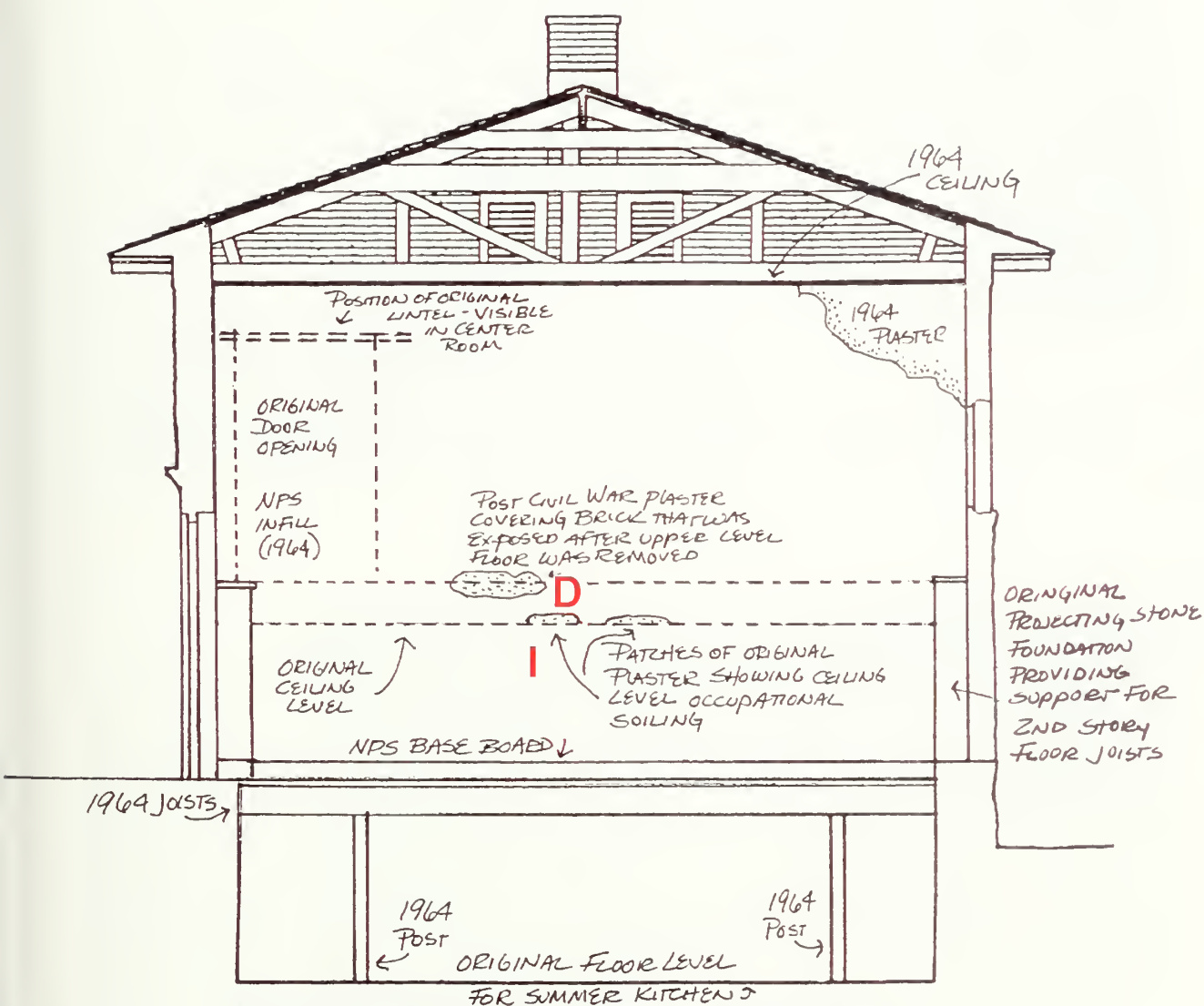




North Dependency, east room, north elevation







**North Dependency, east room, west elevation**

**A**



gold-yellow paint descending from original plaster to bare brick corresponding to area that upper level baseboard would have concealed

one of several unused nailing blocks for upper level baseboard that was not installed

original plaster

built up 1964 shoulder with ledge removed

1964 NPS plaster

Area of bare brick corresponding to where joists resting on the shoulder abutted the south wall. This area was originally concealed beneath the upper level floor and lower level ceiling

**B**



Original mortar and plaster

base board nailing block

Post Civil War QMC plaster

layers of QMC paint on post Civil War plaster layers

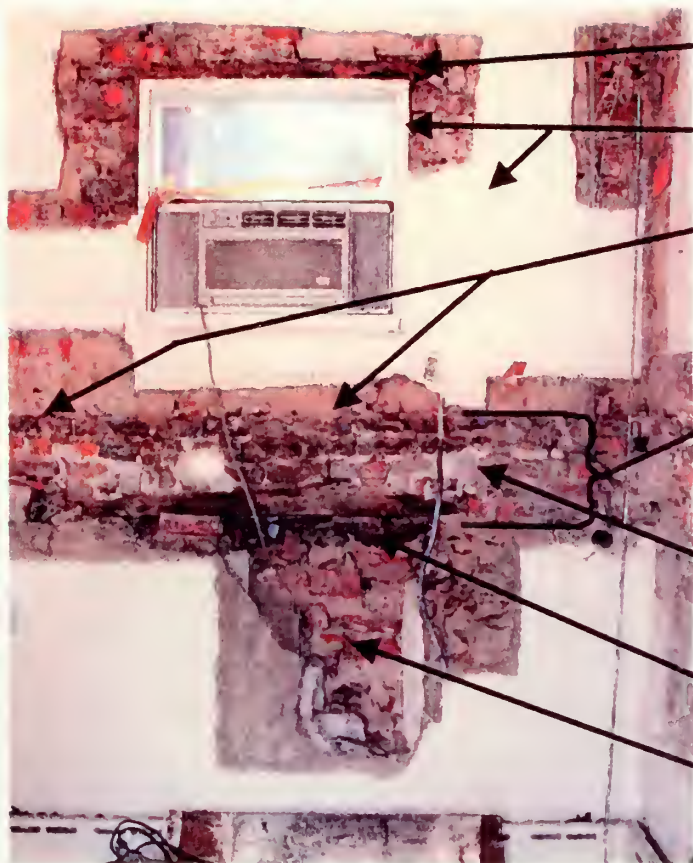
1964 NPS plaster

approximate top of original shoulder

west interior wall - south edge of infilled upper level door opening to center room



C



original wane-edged lintel  
for upper level window

1964 NPS window frame and  
plaster

line corresponding to upper  
level floor with original  
plaster above

gap of bare brick originally  
concealed behind upper  
floor level, joists and  
summer kitchen ceiling

plaster used to patch wall  
finish after upper level  
floor was removed shortly  
after the Civil War

original summer kitchen  
window lintel

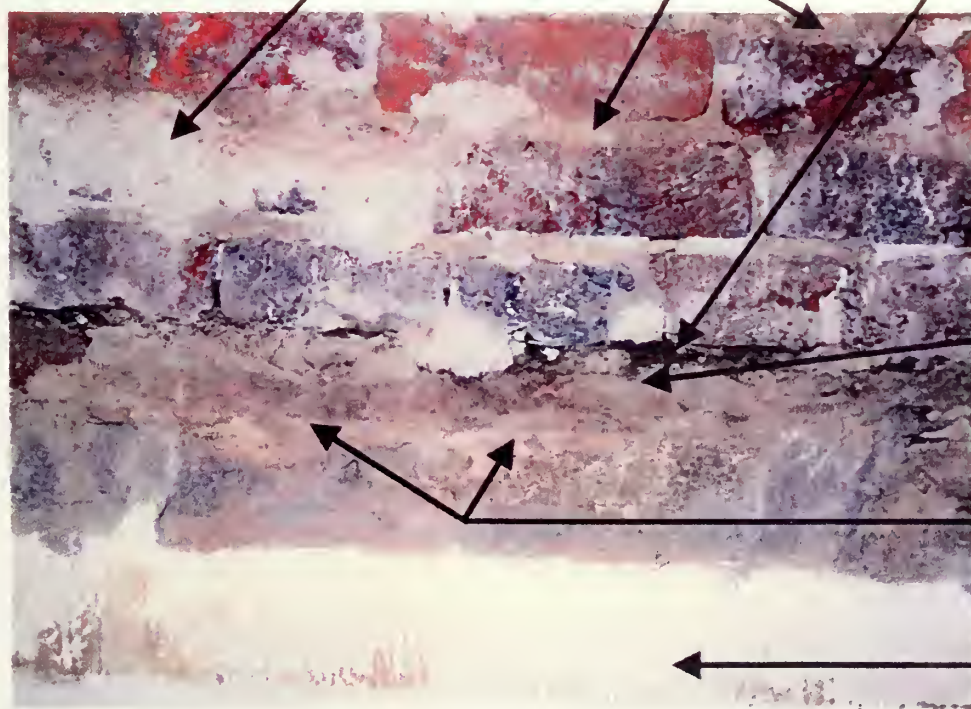
original summer kitchen  
window infill

D

post Civil War plaster covering  
brick that was exposed after upper level  
floor was removed

original mortar

collections of fibers and other  
occupation material originally  
trapped between floor joist  
and wall

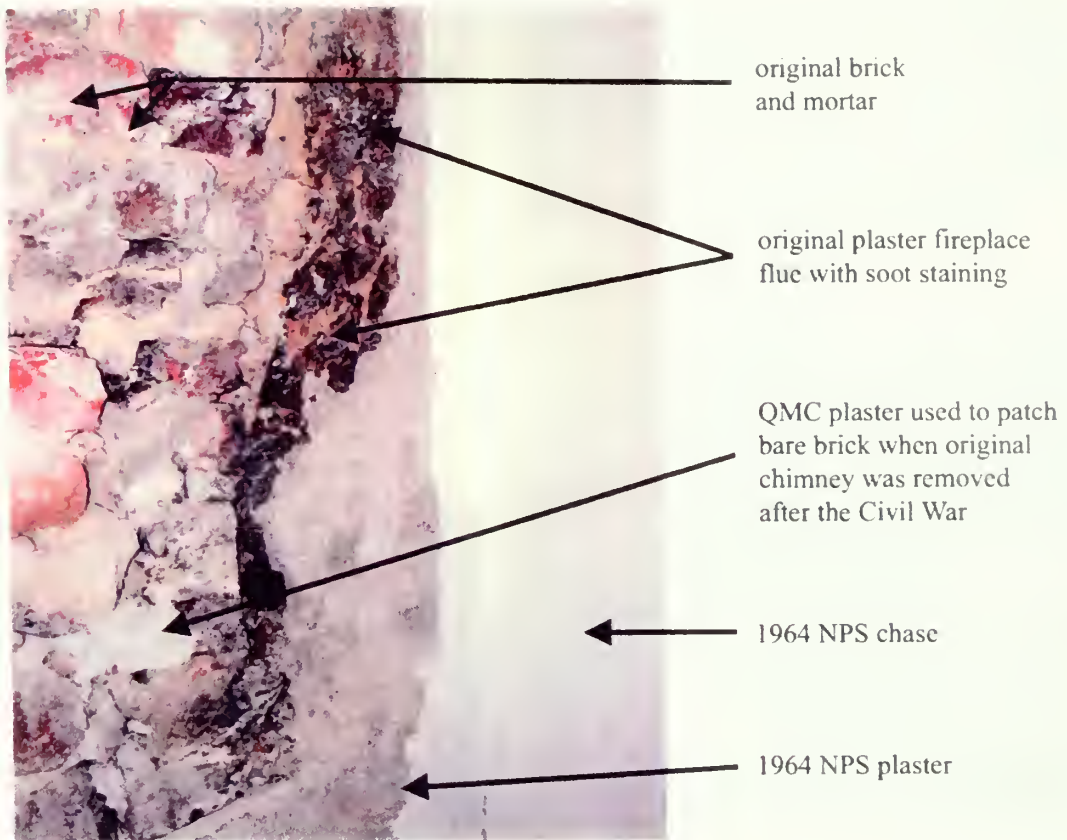


possible  
imprint on  
plaster from  
original  
upper level  
floor joist

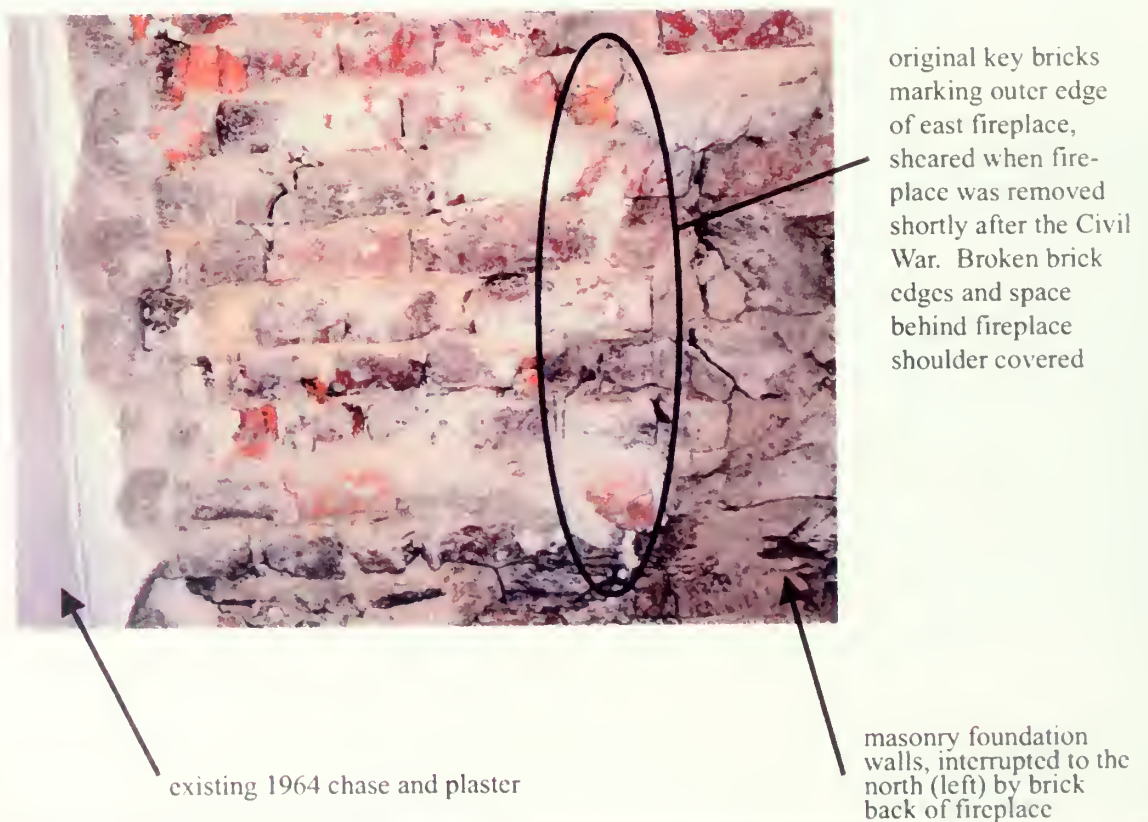
line where  
kitchen plaster  
wall met ceiling  
(note stained  
whitewash  
finish on wall)

1964 NPS  
plaster

E



F



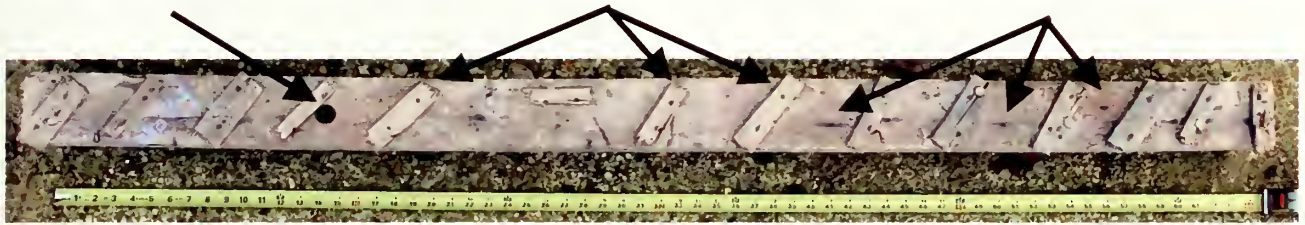


**G**

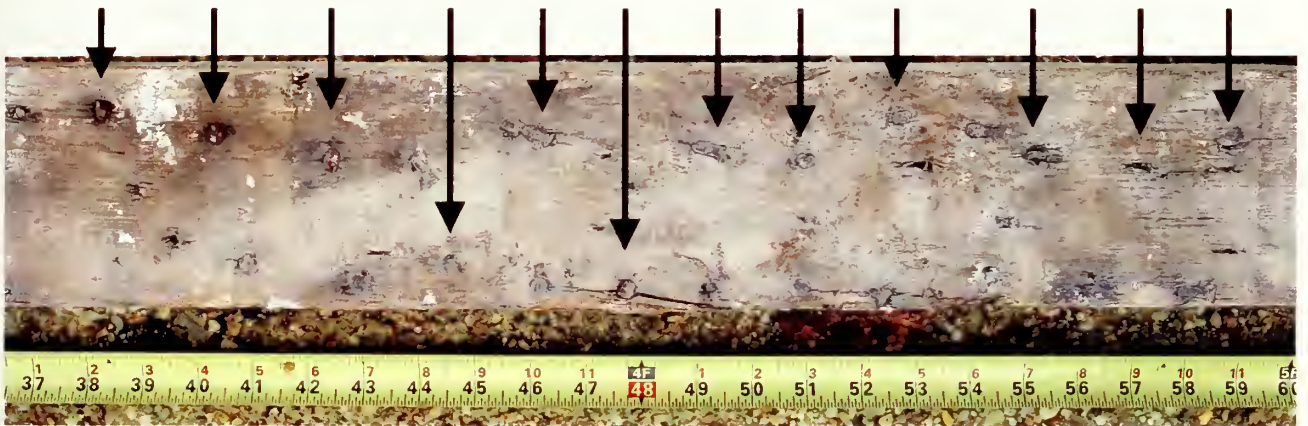
tightening hole

lath added when joist  
was reused as lintel

original floorboard  
nail holes



lath nails, nail holes and staining that correspond to the original position of the wood lath



**H**



doorway to  
courtyard

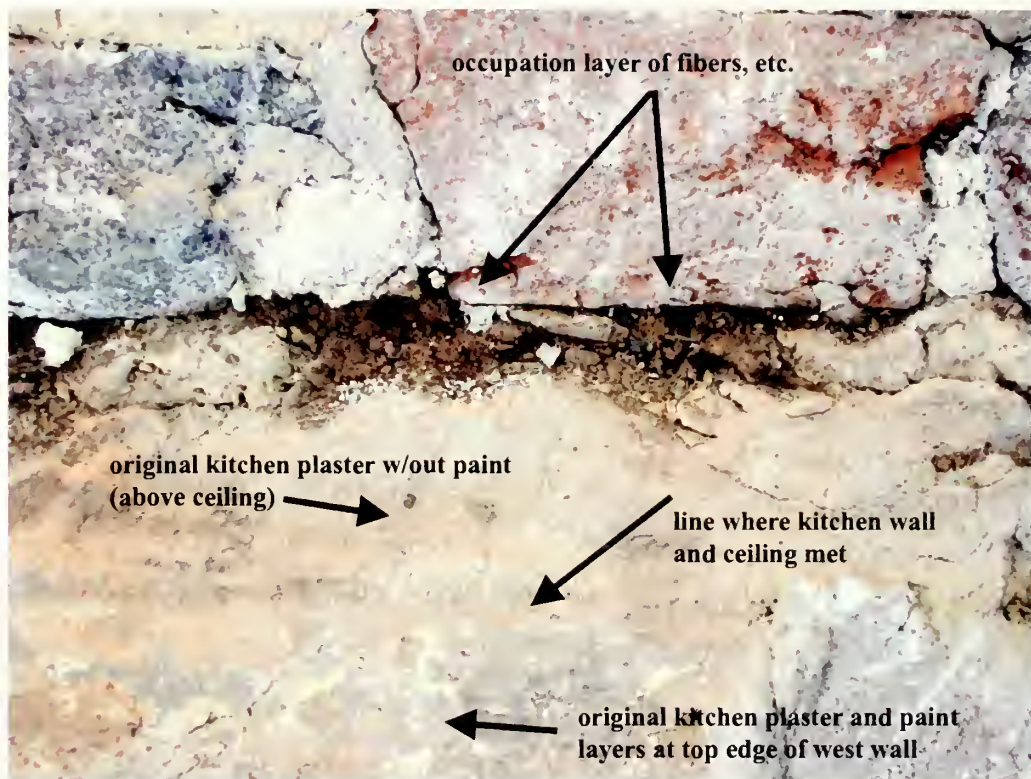
yellow-gold  
paint on portions of  
nailing block

original nailing  
blocks

current floor level

1964 NPS plaster





# Appendix F

## *Supplemental Drawings*

## Arlington House, North and South Dependency Chimneys

By Doug Reed, June 17, 2004

The following pages are blurred, digitalized blown up scans from very clear copies of photos taken during the Civil War and provided to me by Kaaren Staveteig. Under a 30x loupe lense, it is fairly easy to see details that were missed in less clear copies of the photos.

The purpose of this review was to try and better establish the chimney configurations and sizes.

The following page, page 2, is a view North showing the south elevation of the north dependency. Under the loupe lense a careful review of the east end of the roof of the north dependency showed the chimney yet in place above the roofline. The modules making up the chimney cap were too large to be bricks. They appeared to be somewhat irregular, though the surfaces had to be chisel faced since the vertical surfaces appeared to be plumb.

On page 3 is a view of the rear of Arlington House dated June 28, 1864. On the right side of the picture is the west end of the south dependency and above its roof is a chimney. The chimney had the same characteristics of modular construction at the cap too large to be bricks and with what appeared to be irregular shapes. The chimney seen above the south dependency did not belong to the low wing addition to the main house since the page 2 photo clearly shows that chimney was built of bricks with a corbelled brick cap.

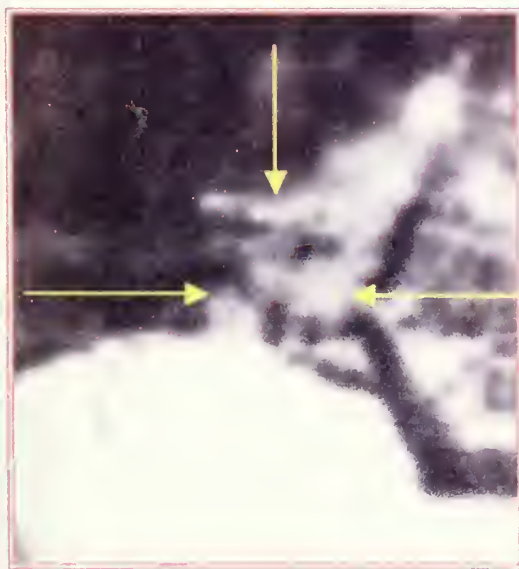
The chimney above the south dependency roof appeared to be the west end south dependency chimney servicing Selina's brick chimney system rising through the building. The play of light and shadow on the shaft of the short chimney indicated there was likely stucco on the shaft. What we may be seeing in the two photos were brick chimney shafts, stuccoed over to match the rest of the building finish scheme. The caps appeared to be a single corbel layer of some decorative module perhaps such as stone, but also perhaps a decorative fired clay product fairly large in size. I can say the cap units were projecting at least 1" over the shaft and were four inches thick or about the same thickness as two courses of bricks.

If you can find a microscope for viewing the chimneys under a higher magnification, the details may reveal themselves as to the cap materials.

See sheet page 4 for recommendations on the chimneys, sizes and caps.

No widths of chimneys are given since widths would have varied per use and size of firebox, and number of fireboxes.





As blurred as it may be, we are looking at a chimney with stucco on the exterior shaft. The large cap modules are cut stone or a fired clay product and were likely stuccoed as well.

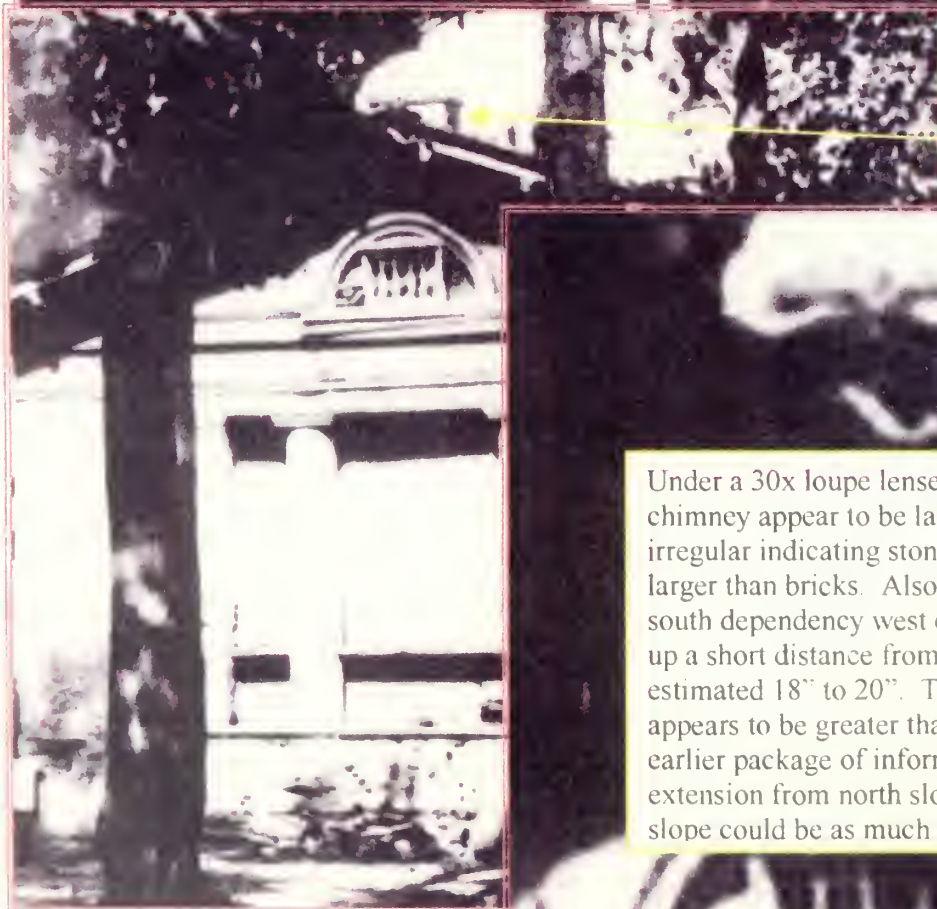
Review a clear photo under a 30x loupe lense and you can see the chimney once you find it. It is visible through the tree limbs and leaves.

I am going to say the rise off the peak is about 18"

In my earlier package of information I called the roof extension at 3" and with a loupe lense on a clear photograph you can clearly see the north slope comb at the peak of the roof clearly larger than three inches. I would push the comb out to minimum of 4" and it could go to six inches



South Dependency Chimney

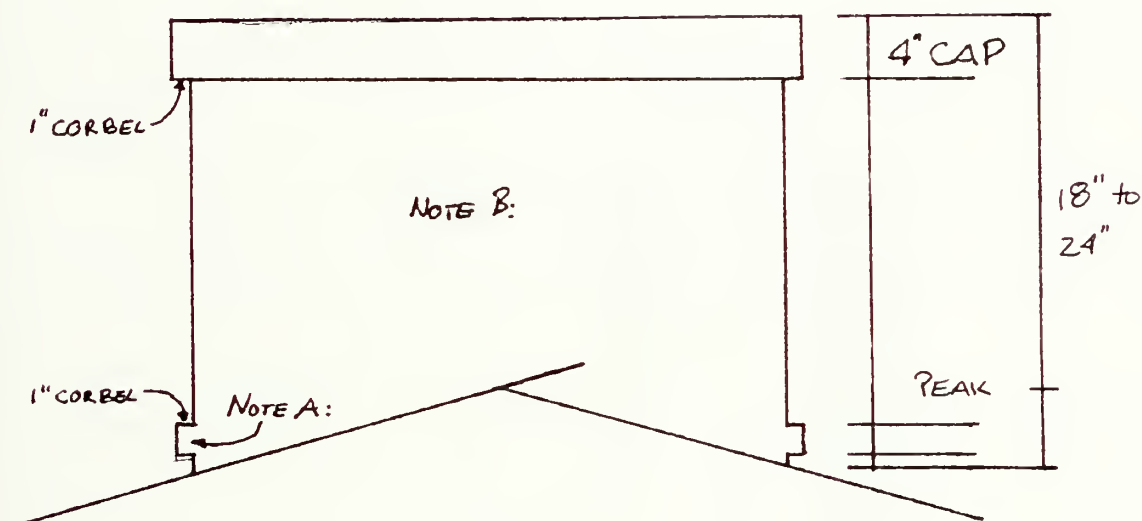


Under a 30x loupe lense, the modules of the chimney appear to be large and somewhat irregular indicating stone. They are definitely larger than bricks. Also, the chimney is the south dependency west chimney projecting up a short distance from the peak, an estimated 18" to 20". The peak combing appears to be greater than 3" called for in my earlier package of information. The extension from north slope out over south slope could be as much as 4 to 5".



DOUG REED      JUNE 17, 2004      ARLINGTON HOUSE

DEPENDENCY CHIMNEYS ABOVE ROOF



NOTE A: DRIP EXTENSIONS OCCUR ONLY ON SLOPE SIDES ONLY. 1 COURSE OF BRICK CLOSEST TO ROOF SLOPE EXTENDS OUT 1". ALLOWED ENDS OF SHINGLES TO TUCK UP UNDER BRICK COURSE FOR MORE PROTECTION AGAINST PRECIPITATE WEATHER.

NOTE B: COVER ENTIRE CHIMNEY ABOVE ROOF IN STUCCO TO MATCH MAIN BODY OF BUILDINGS. THIS WAS USUALLY DONE AFTER SHINGLES WERE APPLIED.

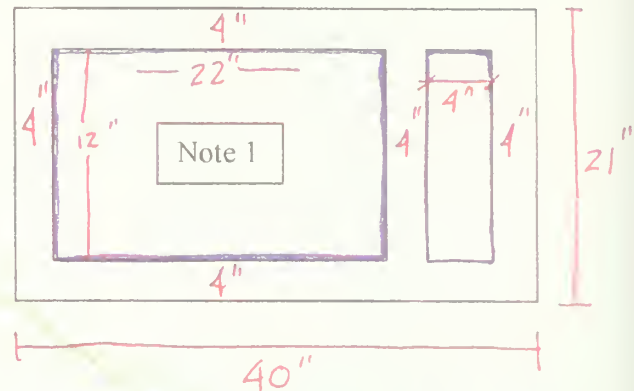


# Arlington House

## Configuration for East chimney North Dependency

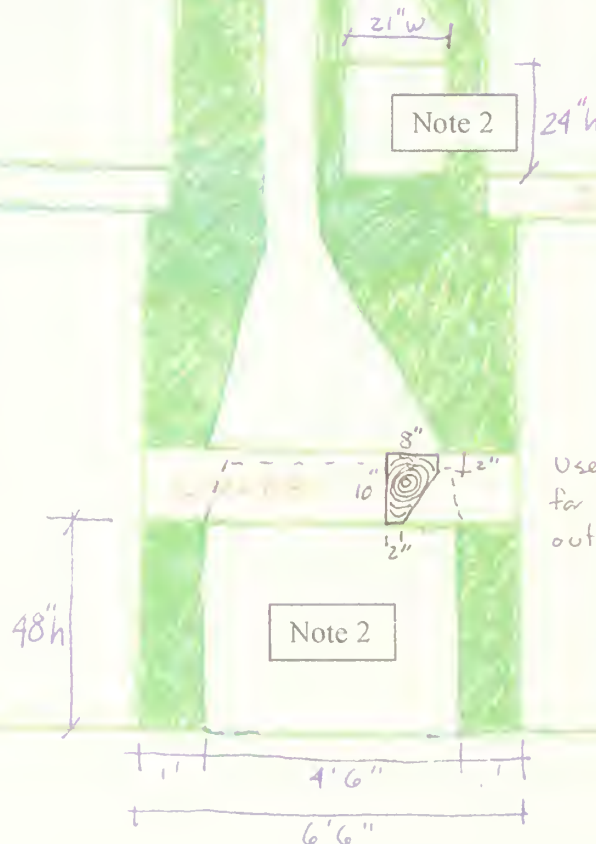
Large flue with 22" x 12" dimensions with firebox opening of 54" wide to 48" high will have a draw ratio of 10.2%

Small flue with 4" x 12" dimensions with firebox opening of 21" wide to 24" high will have a draw ratio of 9.52%



Note 1: Flue opening measurements are figured after 1/2" refractory parging is applied to all flue walls.

Note 2: Firebox opening measurements are figured after plaster has been applied to all cheek walls.



by D.C. Reed  
June 17, 2004

## DOUGLASS C. REED

35 East Irvin Avenue  
Hagerstown, Maryland 21742  
Phone (301) 665-9217  
Fax (301) 791-7881  
Email – [dcraigreed@aol.com](mailto:dcraigreed@aol.com)

March 21, 2004

### Arlington House – Dependencies

### Exterior Doors

There is one good photograph of a slave sitting in a doorway believed to be the North Dependency, east door position (ND3). The details of the door, jamb and sill visible in the photograph clearly show a much older door than the dates of the dependencies. The style of the door and jamb indicate late 18<sup>th</sup> or early 19<sup>th</sup> century construction. The quality of construction and high style appearance are out of place on a slave or support building.

Another telltale clue seen in the photo indicates the door, jambs and sill as well as the decorative backbands were reused, salvaged components from another location, presumably the main house. The pieces were removed from a larger, grander building, saved for reuse and installed in the dependencies when they were built. The manner in which the sill was attached to the jambs and the mitered corner of the backband piece on the lower right jamb clearly indicates the pieces are not in their original locations.

I recommend the doors, jambs, headers and sills be built to be as close to that which is seen in the slave photo. There was a major remodeling of the main house and there were enough doors and jambs remaining to be salvaged and reused on the newer dependencies. The door and jamb components of any house were expensive and the salvage and reuse of these elements was common. The heavy post type jambs should be built and located per the attached sketches. The sill seen in the photo and all the other sills were likely altered since it appeared the doors were shortened and therefore the jamb set had to be shortened in height as well. The north dependency doors were roughly 6' 8 ½" to 10 ½" high. The south dependency door heights were anywhere from 3" to 8" shorter than its opposing neighbor.

All existing doorjambs should be removed and replaced with faithful replicas made to fit the existing masonry rough openings. All masonry rough openings should be investigated to see if the original door openings have ever been altered. If not, make wood jambs and doors to fit existing openings. If the openings have been altered, make new jambs and doors to fit adjusted and restored to original masonry openings. I also recommend the poorly connected sills be replicated to show all things were indeed not perfect.

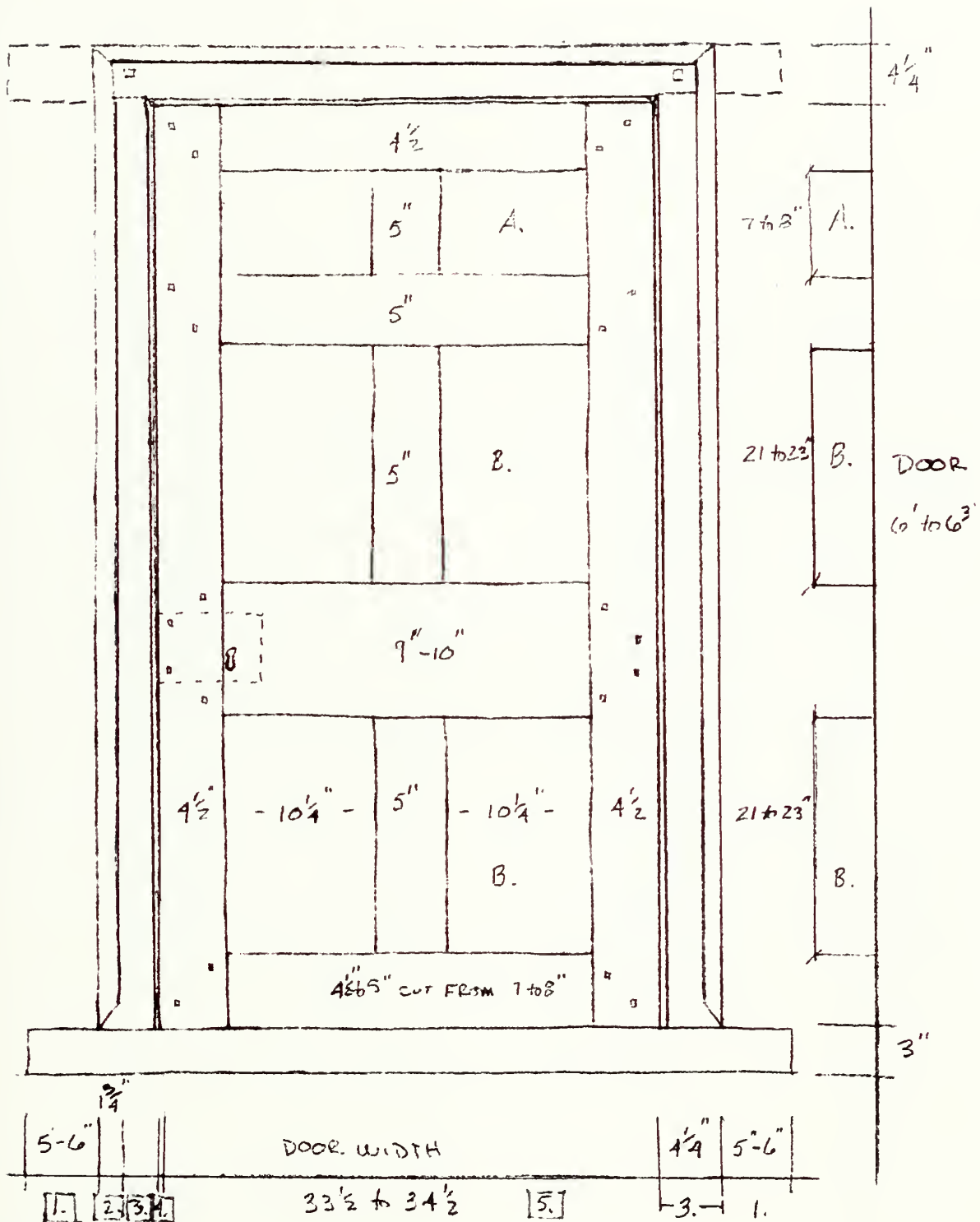
Hardware can be early sheet iron box locks, keyed. They can be stock locks (no knob sets) or box locks with knob sets. Hinges were clearly 4" narrow butts, cast iron, 5 knuckle four screws per leaf butt hinges. Use only straight slot flat head wood screws set flush or slightly sunk below the surface of the butt hinges.



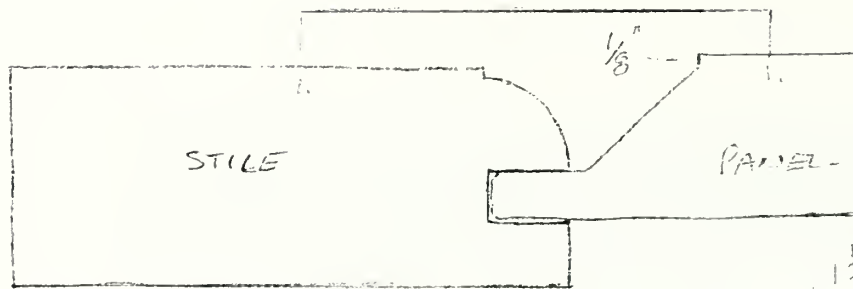
Bright rain is  
coming in this  
morning to a storm  
here inside  
the house.



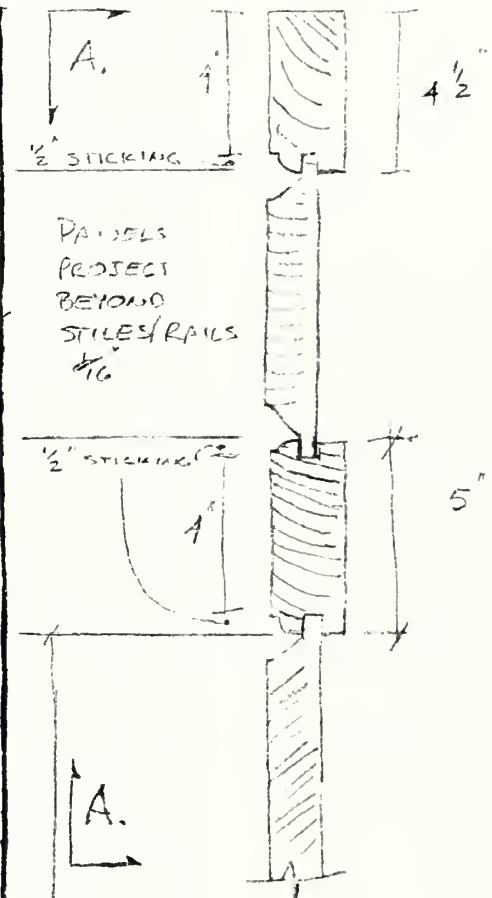
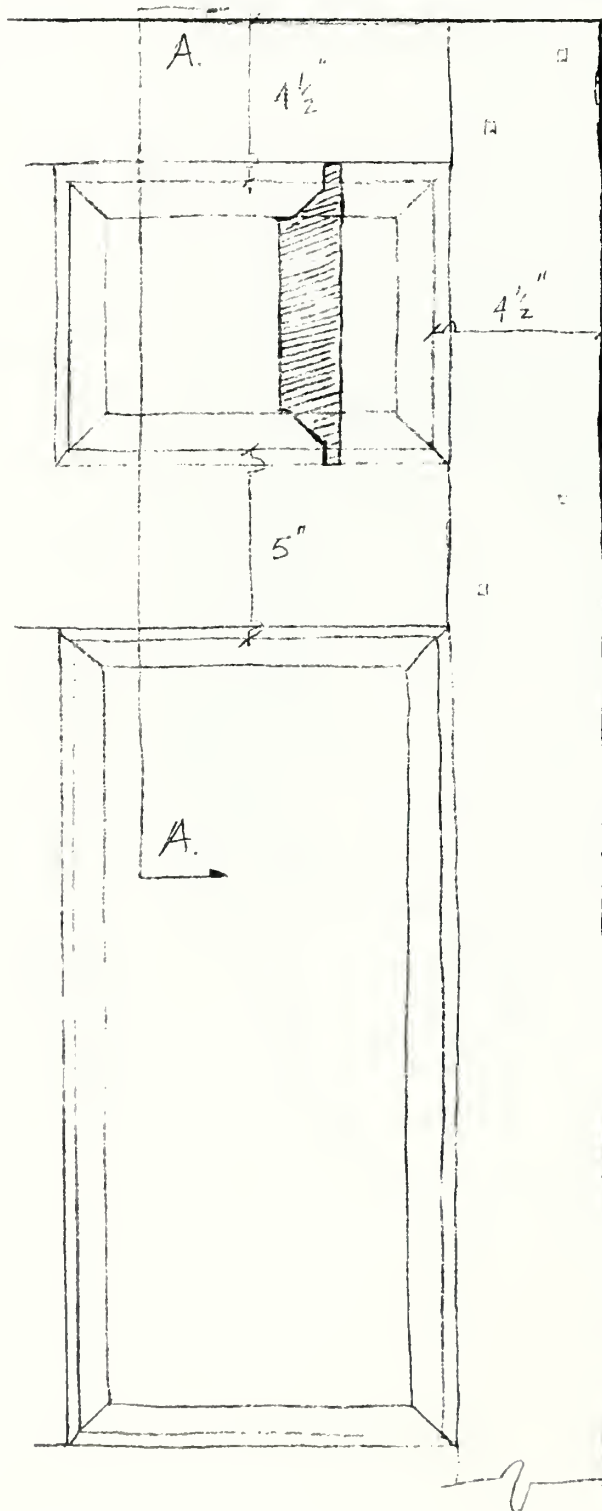
MASONRY R.O. 3"



1. MASONRY EARS
2. BACKBANDS  $1\frac{3}{8}$  to  $1\frac{3}{4}"$  WIDE
3. SINGLE FIELD JAMB  $4\frac{1}{2}"$  WIDE
4. FULL ROUND BEAD  $\frac{3}{4}"$  to  $\frac{7}{8}"$
5. DOOR WIDTH



1. PANEL PROJECTS  
PAST STILES/RAILS



NET PANEL HEIGHT  
21" to 23"

MIDDLE AND LOWER  
PANELS EQUAL IN HEIGHT

ARLINGTON HOUSE 3

BACK BAND  
PERVERSE OGGEE

HEAVY IN SIZE

$\frac{3}{4}$ " AW -  $\frac{7}{8}$ "

JAMB  
4 1/4" x 4 1/4"

Mitsouky

## CASING

$1" \times 3\frac{5}{8}"$

$\frac{1}{2}$  BEHP

DOOR

 $1\frac{1}{2}$ 

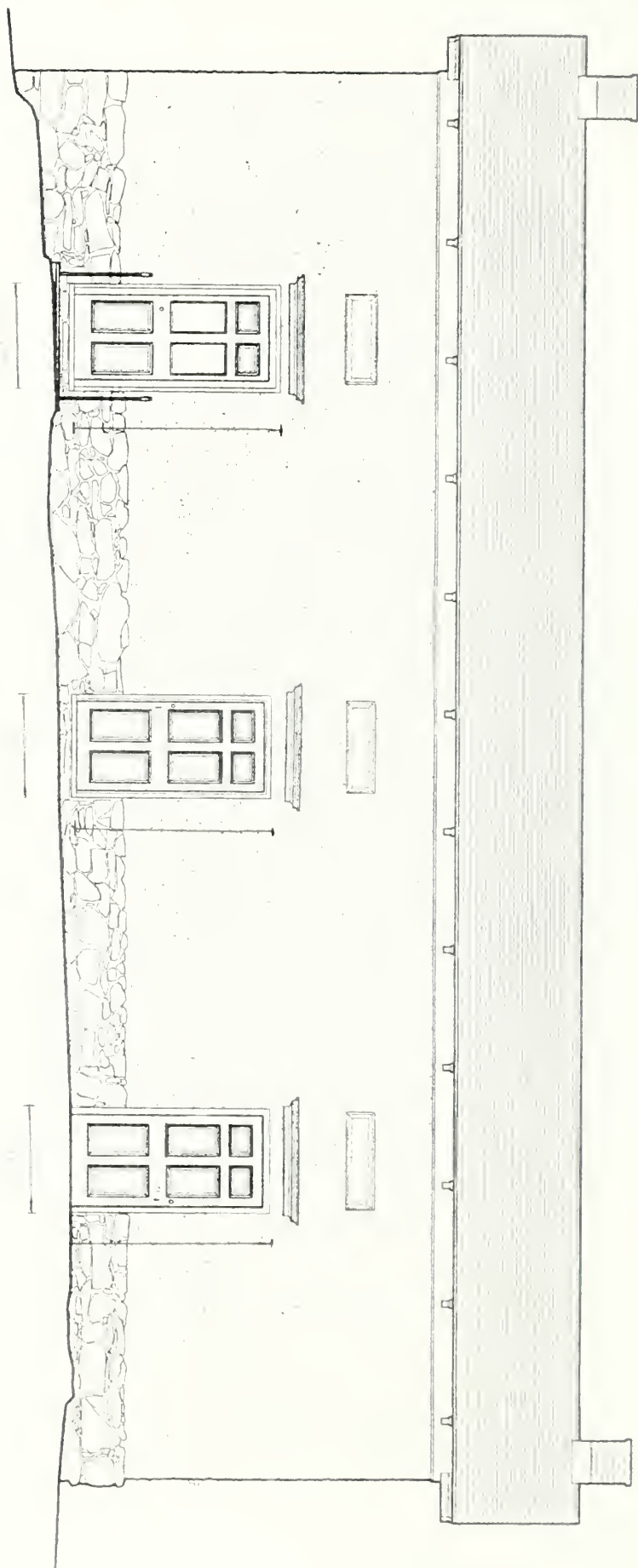
14

PLASTER (or ROUGH CAST)

↑ (Need to catch on if exposed many)

ca. 1802 3 or 4 KNUCKLE  
BLACKSMITH MADE BUTTS  
1½" LEAF 3 or 4 SCREWS  
3½" to 4" LONG. FIXED PIV.





SOUTH ELEVATION  
NORTH QUARTERS

## **DOUGLASS C. REED**

35 East Irvin Avenue  
Hagerstown, Maryland 21742  
Phone (301) 665-9217  
Fax (301) 791-7881  
Email – [dcraigreed@aol.com](mailto:dcraigreed@aol.com)

March 21, 2004

### **Arlington House – Dependencies**

### **Wood Roofing**

It was not the practice of builders during the 19<sup>th</sup> century to solid sheath a roof that received wood shingles. Certainly there were exceptions, but the vast majority of the wood shingles roofs were applied over skip sheathing roof lath spaced at a predetermined exposure. Skip lathing was made from a variety of woods, both hard and soft species. However, the roofing “lath” (the proper term) usually measured 1 1/8” x 2 1/4”. The lath were fastened to each rafter they crossed with an 8d cut or hand made nail.

Wood roofing south of the Potomac River was typically set at a shallower pitch than the roofing slopes North of the Potomac River. The shallow sloped roofs such as those used at the Arlington House dependencies precluded the use of long shingles (also known today as double bevel shingles). The long shingle needed a steep slope to shed water successfully.

The standard short lap wood shingle was short, narrow and lapped at the lower half. The average widths of the standard lapped shingles were 5” to 6” wide rarely exceeding 7” wide. The length of the lapped shingles ranged from 14” to 24” long with the typical lengths measuring from 18” to 20”. Tapered smooth on both sides of the shingles with a draw knife, the shingle butts were about 1/2” thick and tapered to a pointed thin end. The shingles were laid with side laps of from 1 1/4” to 1 1/2”. The exposures of the shingles were laid usually at 5 1/2” for shallow sloped roofs. It is also possible there were two different exposures for the different slopes of the roofs. The south exposure could have been 5 1/2” to 6” while the north slopes of the dependencies could have been from 5 to 5 1/2”.

With no hard evidence to gauge the original shingle widths, exposures and side laps, I recommend the following: Use a high quality yellow cedar shingle, sawn, from the British Columbia area of Canada. The shingles should be taper sawn, not wider than 7”, 18” to 20” long, vertical grain and all shingles should be applied with 5d and 6d where appropriate galvanized cut nails. I recommend that you do not specify fire retardant treatment. I also recommend that you do not interlace roofing felt paper of any type or weight between the rows of shingles.

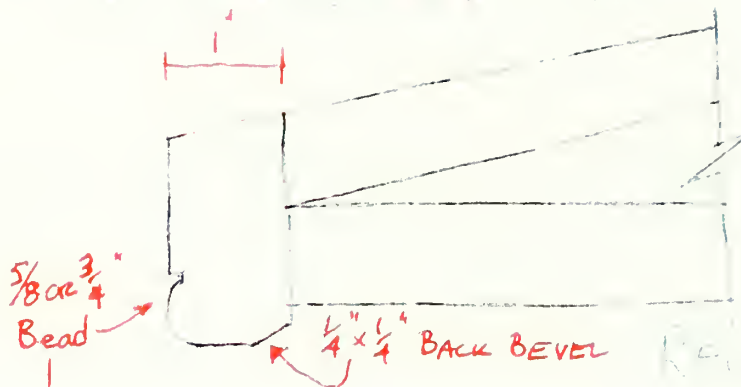


• EXISTING EAVE DETAIL

• NOT A PICK UP DETAIL

THE DETAIL IS A PICK UP DETAIL WITH TWO BUILDINGS, WHERE IT

• RECOGNIZED AT LEAST VISIT (AFTER) BUILDING REPAIRS RISK.



OR: MATCH BEAD SIZE ON EXT. BUILDING

THE SUGGESTED ARE TYPICAL FOR BUILDING INTERIOR.

THE SUGGESTED ARE STRICTLY INTERIOR AND DEPENDENCIES

THE SUGGESTED UNDETERMINED, THERE ARE THE BUILDING DETAILS.

1-14-1988

1-14-1988

1-14-1988

1-14-1988

ARCHITECTURAL FLOOR DETAILS

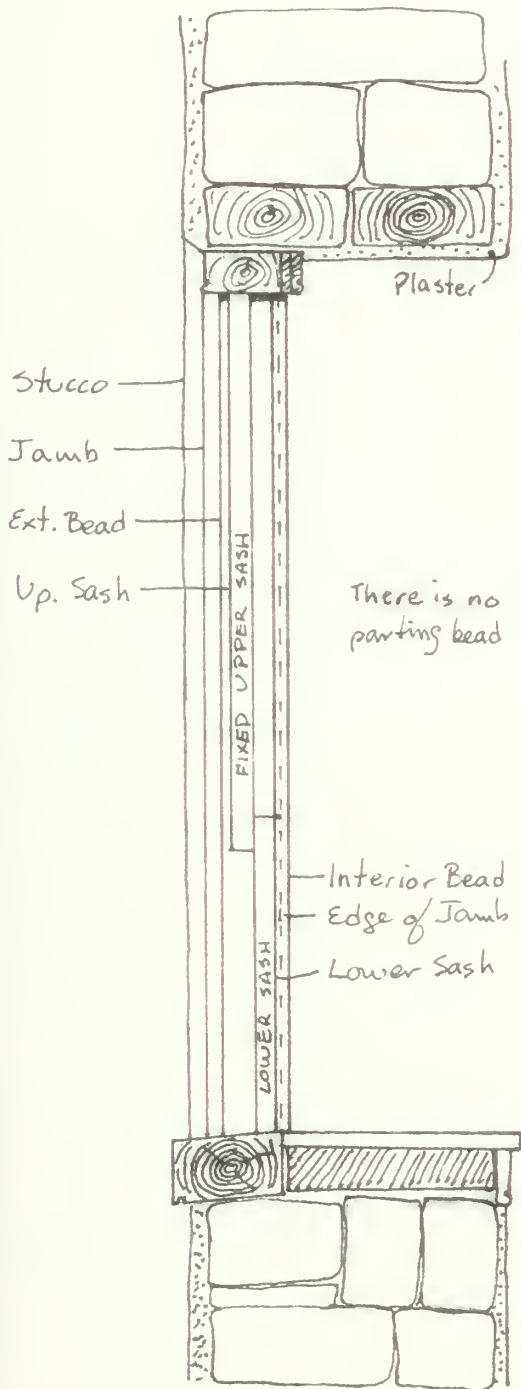
TYPICAL EAVE DETAILS



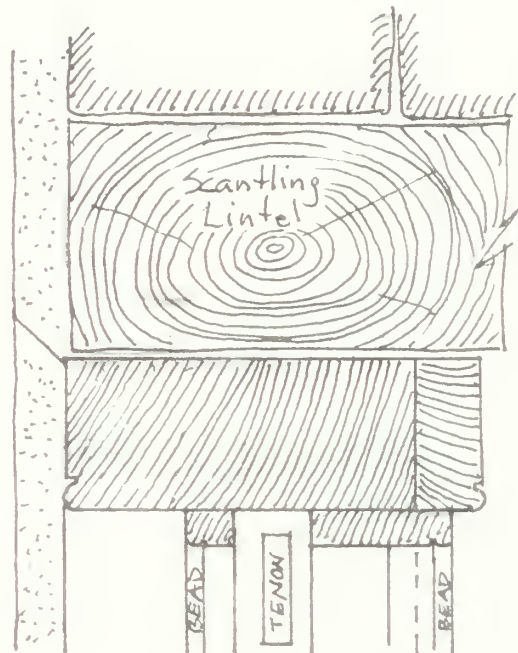
D.C. REED  
North Dependency

JUNE 16, 2004  
ND-7 Window

ARLINGTON HOUSE  
PAGE 1 of 2

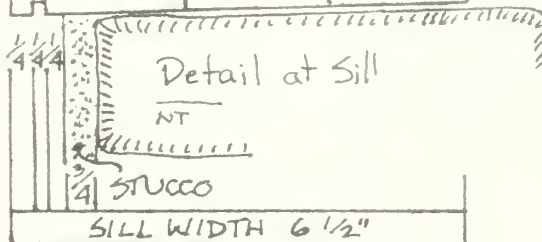
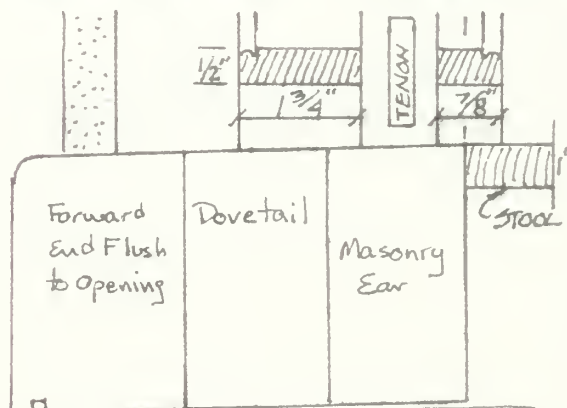


NOTE A: Interior bead is to be positioned to cover joint between jamb & casing



1 3/4"	1/4"	1 1/8"	1 1/8"	5/8"	1 1/4"
	EXT. BEAD	UPPER SASH	LOWER SASH	TRACK	INTERIOR BEAD

JAMB WIDTH 5"					
STUCCO	JAMB	EXT. BEAD	LOWER SASH	NOTE A	
3/4"	3/4"	1 3/4"	1 1/2"	1 1/8"	7/8"
				3/8"	1 1/4"

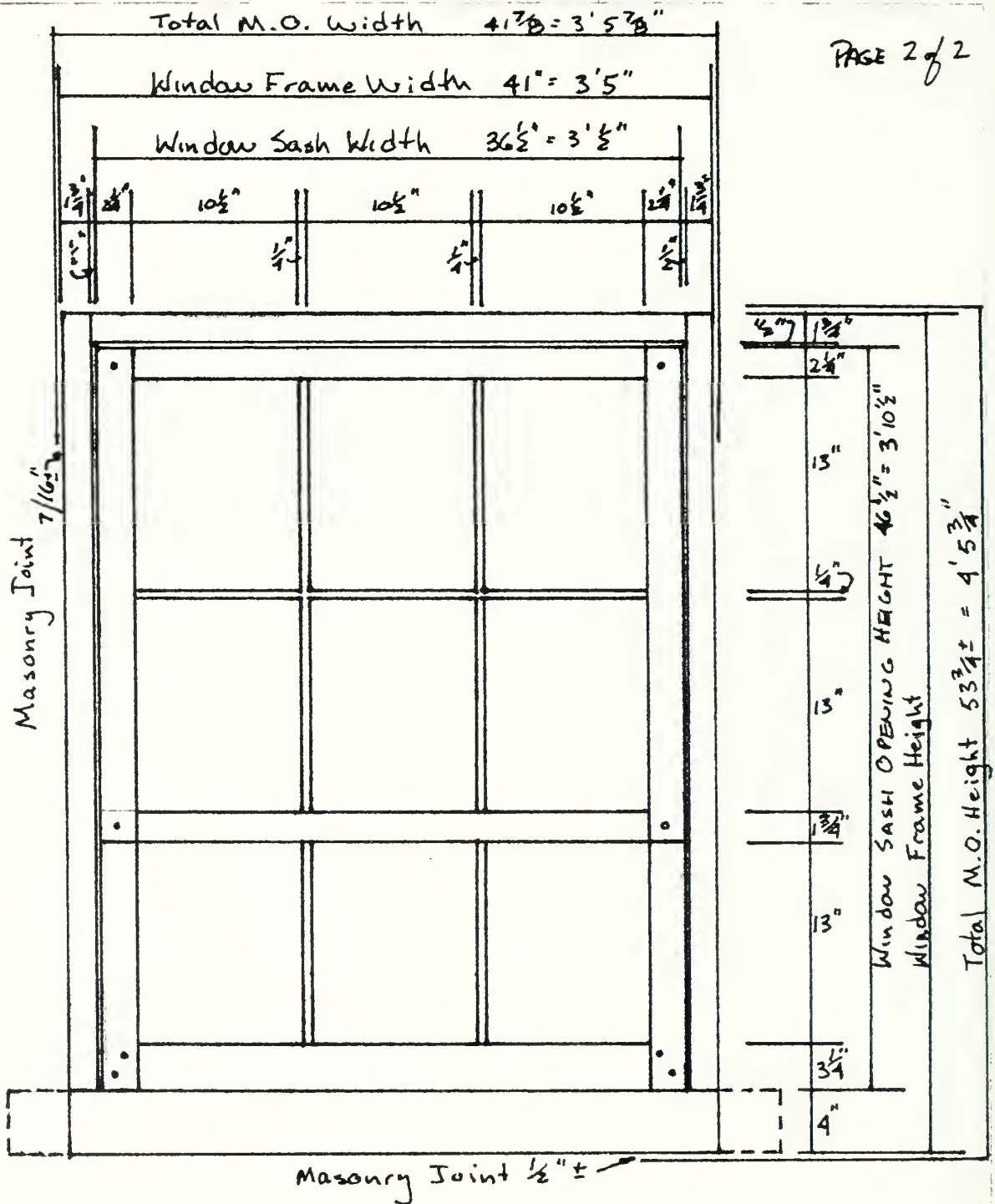


D. C. REED

JUNE 15, 2004

ARLINGTON HOUSE

PAGE 2 of 2



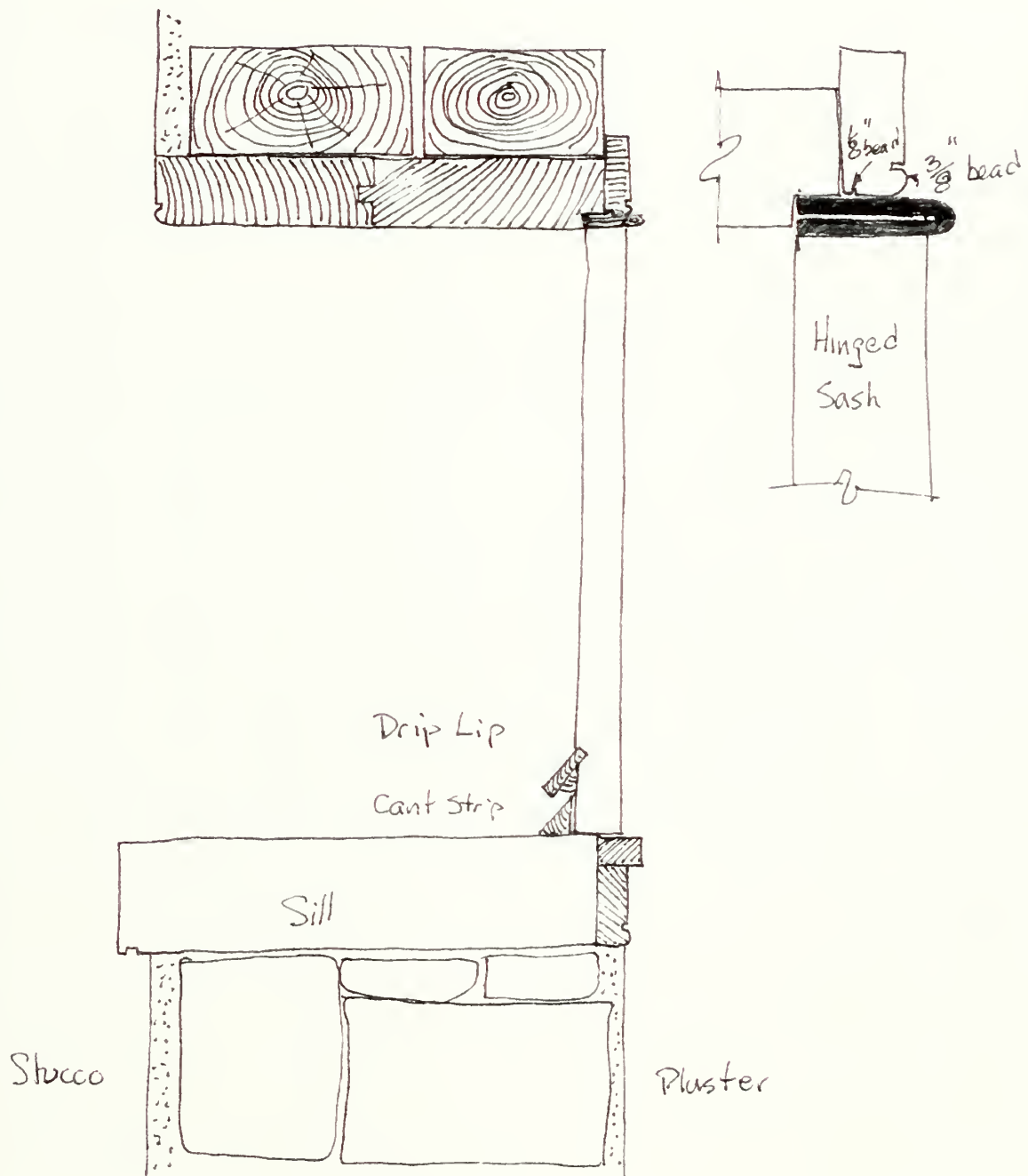
EXTERIOR WINDOW DIMENSIONS / NTS



Masonry Ear  
Jamb Dovetail

SILL PLANK w/ MASONRY EAR & DOVETAIL

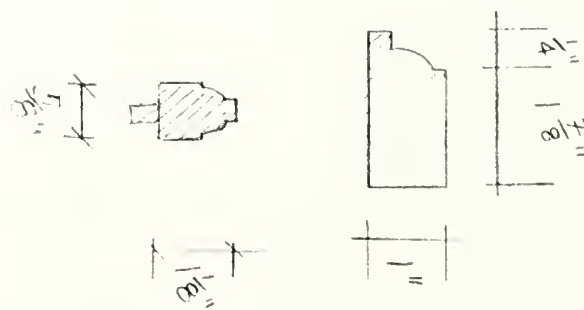
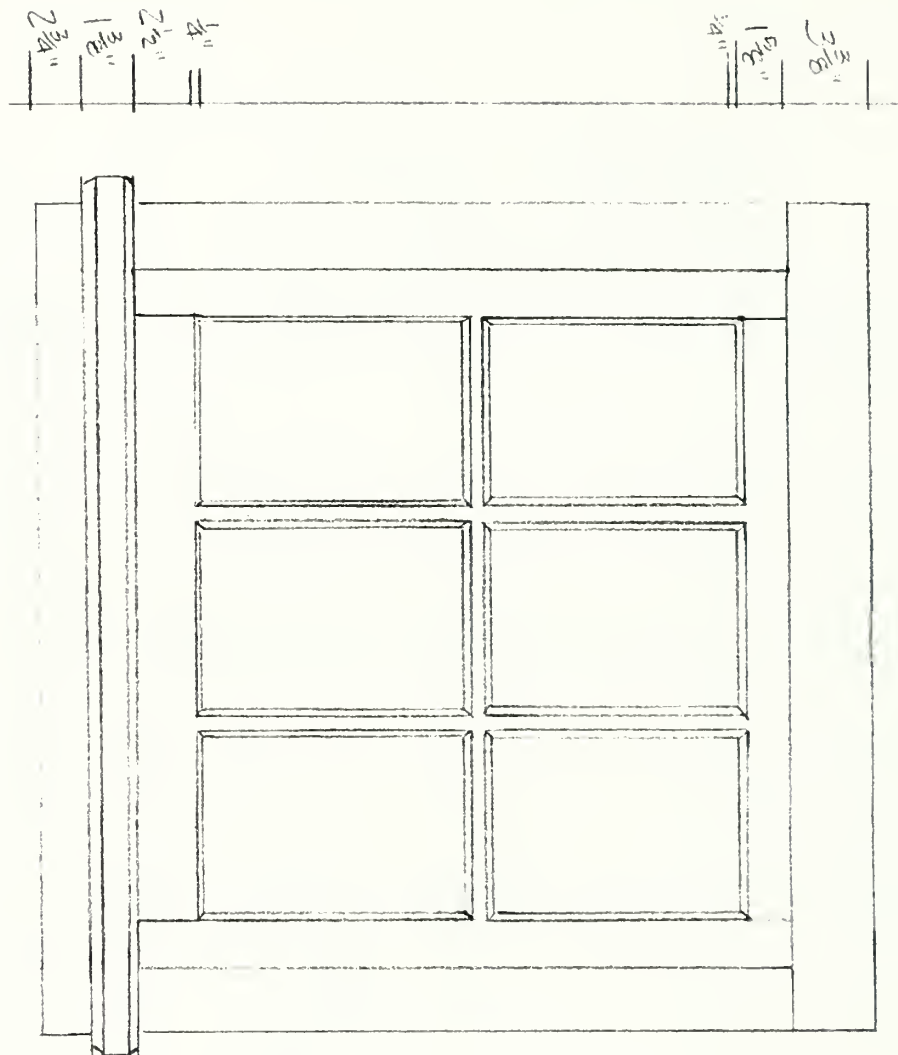
## In swinging sash details



In and up swinging sashes were secured open by two methods: 1. Ceiling hooks of wrought iron rod or heavy wire w/ eyes or stirrups in center of sash rail; or, 2. sticks to prop between sill & sash. Wrought iron hook and stirrup best choice.

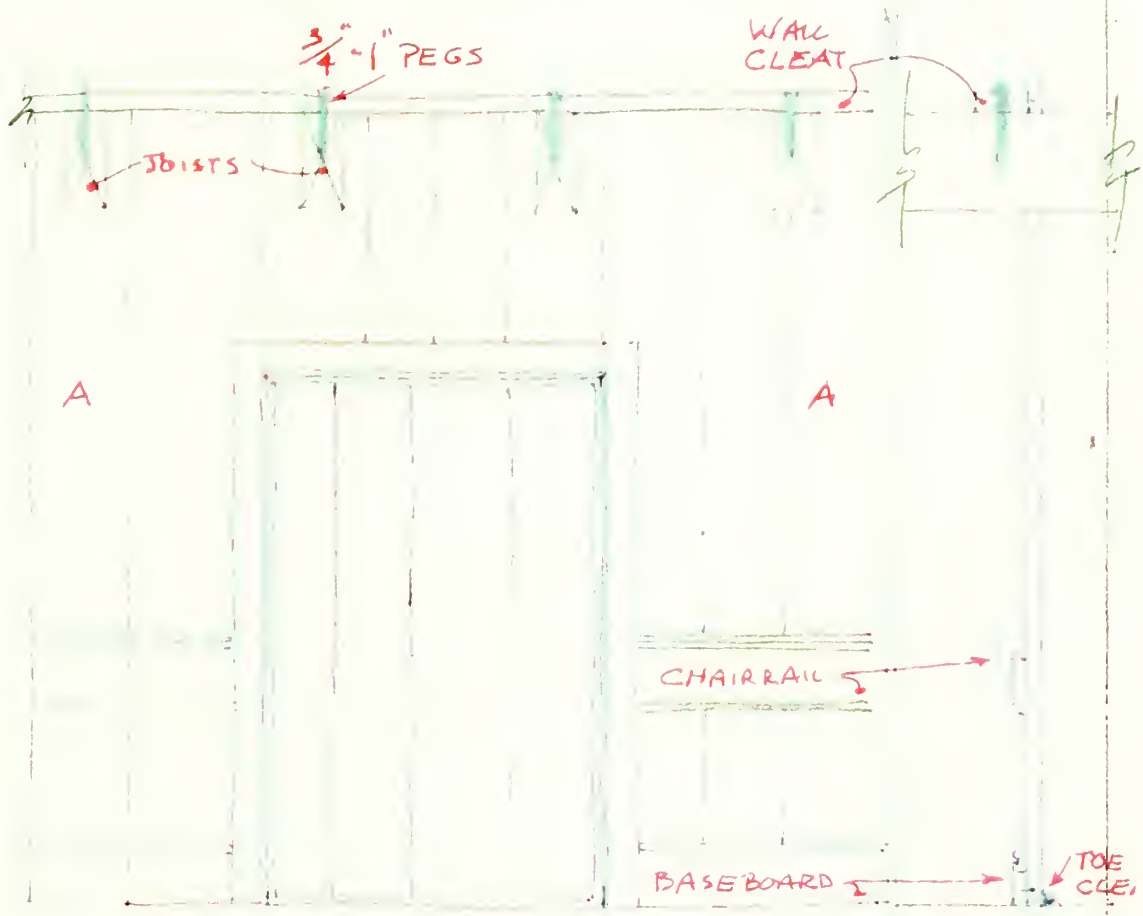


Window ND9



3/21/04

ADLINGTON HOUSE NORTH DEPENDENCY MIDDLE ROOM  
TYPICAL VERTICAL WOOD WALL CONSTRUCTION



ELEVATION

SECTION

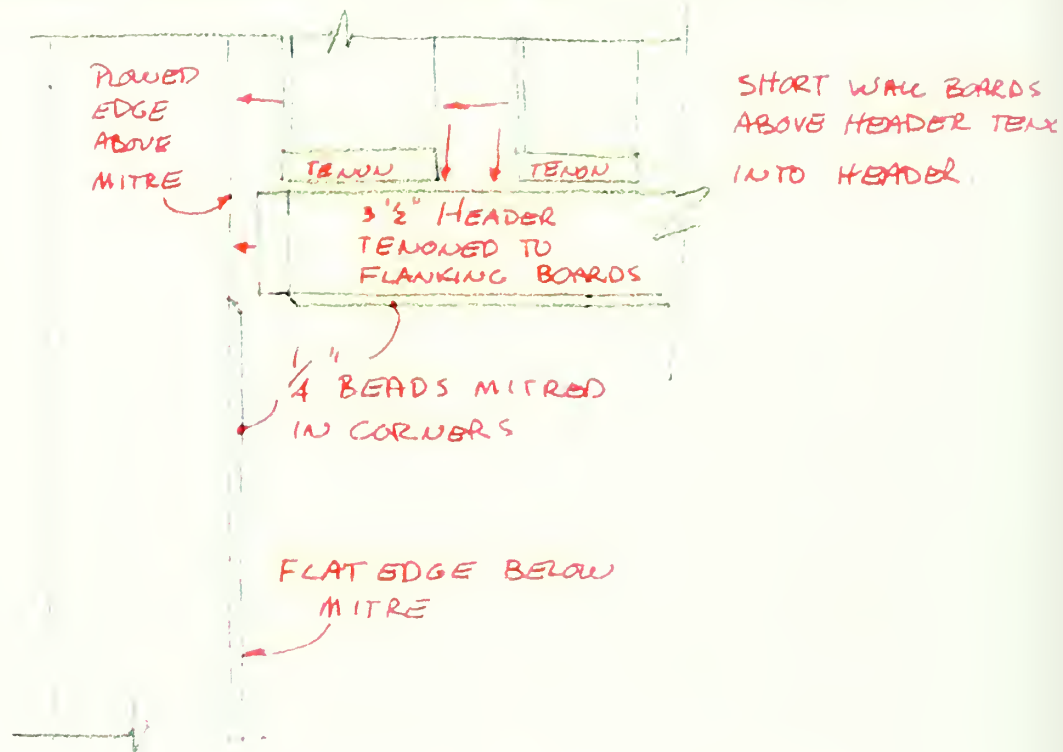
A. VERTICAL WALL BOARDS 1" THICK, RANDOM WIDTH 8"-13"  
1/4" BEADS BOTH SIDES / TONGUE & GROOVED  
INITIALLY NAILED AT FLOOR TO CANTED CLEAT.  
NAILED TO TOP CLEAT WOOD PEGGED ABOVE OR  
BELOW OVERHEAD FLOOR JOISTS.

B. WALL STIFFENED WITH CHAIRRAIL,  
BASEBOARD & DOOR CASING

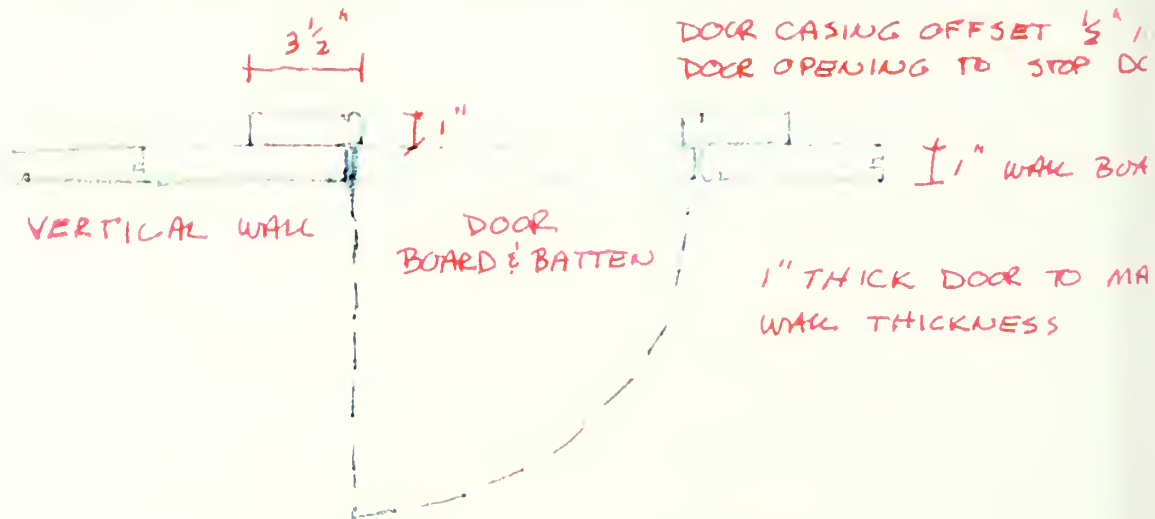
1" x 5" x 5 1/2" / 1/2" BEAD	TOP RAIL 3/8" x 2" / 1/2" BEAD
OPTIONAL	BOTTOM RAIL 3/8" x 5" / 1/2" BEAD

3/21/04

# ARLINGTON HOUSE / NORTH DEPENDENCY VERTICAL WOOD WALL DOOR OPENING DETAILS.



## EXPLODED HEADER DETAIL AT CORNER



1/4" BEADS MITRED IN CORNERS  
FLANKING BOARDS & CASING



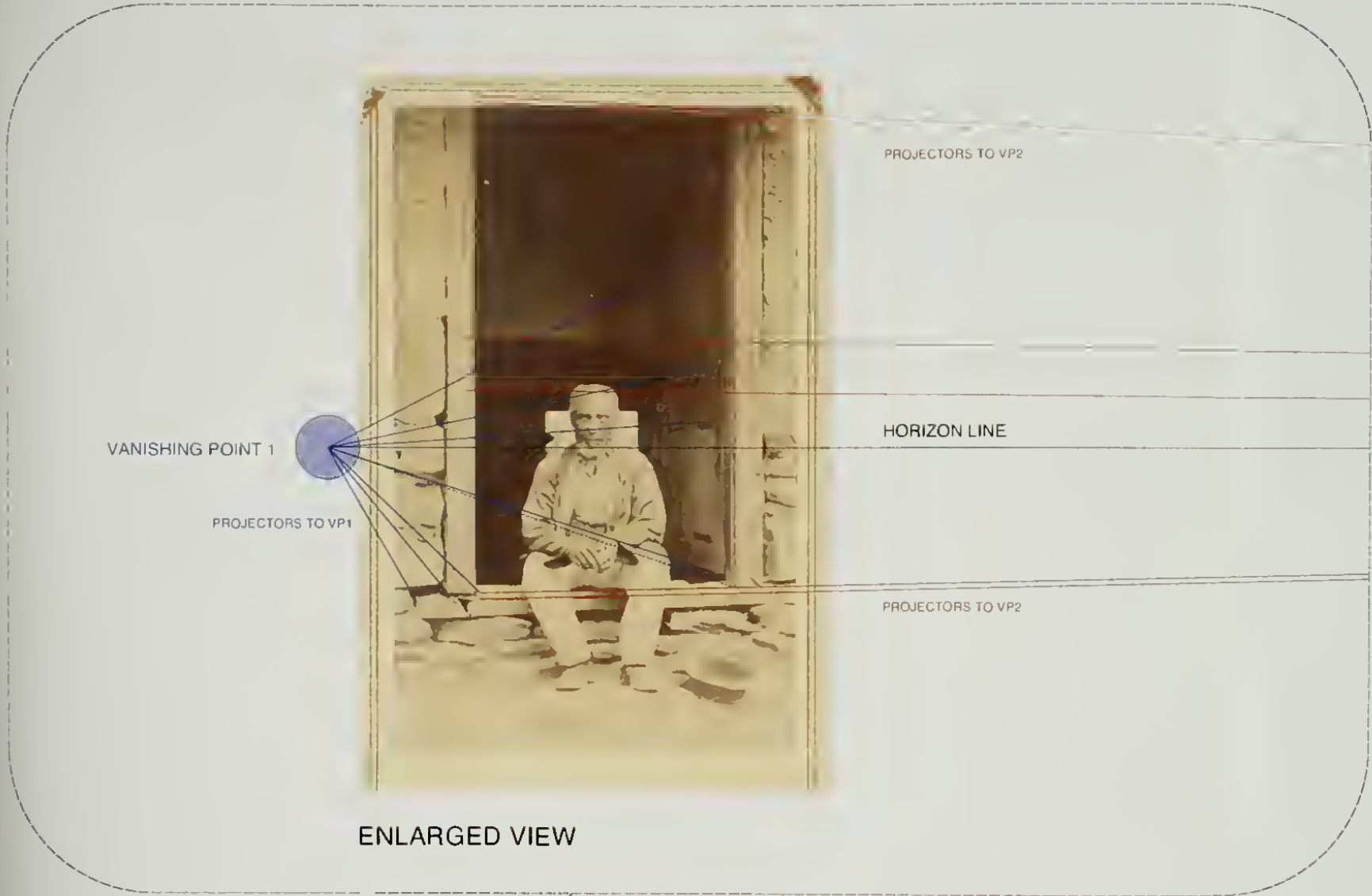
# Appendix G

## *Photo Study*



DESCRIPTION:

THIS SHEET ILLUSTRATES THE BASIC CONSTRUCTION OF THE PERSPECTIVE OF THE UNCLE JOE PHOTOGRAPH. VANISHING POINTS WERE FOUND ALONG THE HORIZON LINE BY PROJECTING LINES FROM IN THE PHOTOGRAPH THAT WERE ASSUMED TO BE PARALLEL.



UNCLE JOE PHOTO SHOWING BASIC PERSPECTIVE CONSTRUCTION  
( DOTTED LINE ILLUSTRATES VARIANT CONDITION AT RIGHT DOOR FRAME.)



VOLZ &  
ASSOCIATES, INC  
1105 West 42nd Street  
AUSTIN, TEXAS 78756  
(512) 476-0433  
Fax (512) 476-2198

ARLINGTON HOUSE  
NORTH DEPENDENCY  
PHOTO STUDY

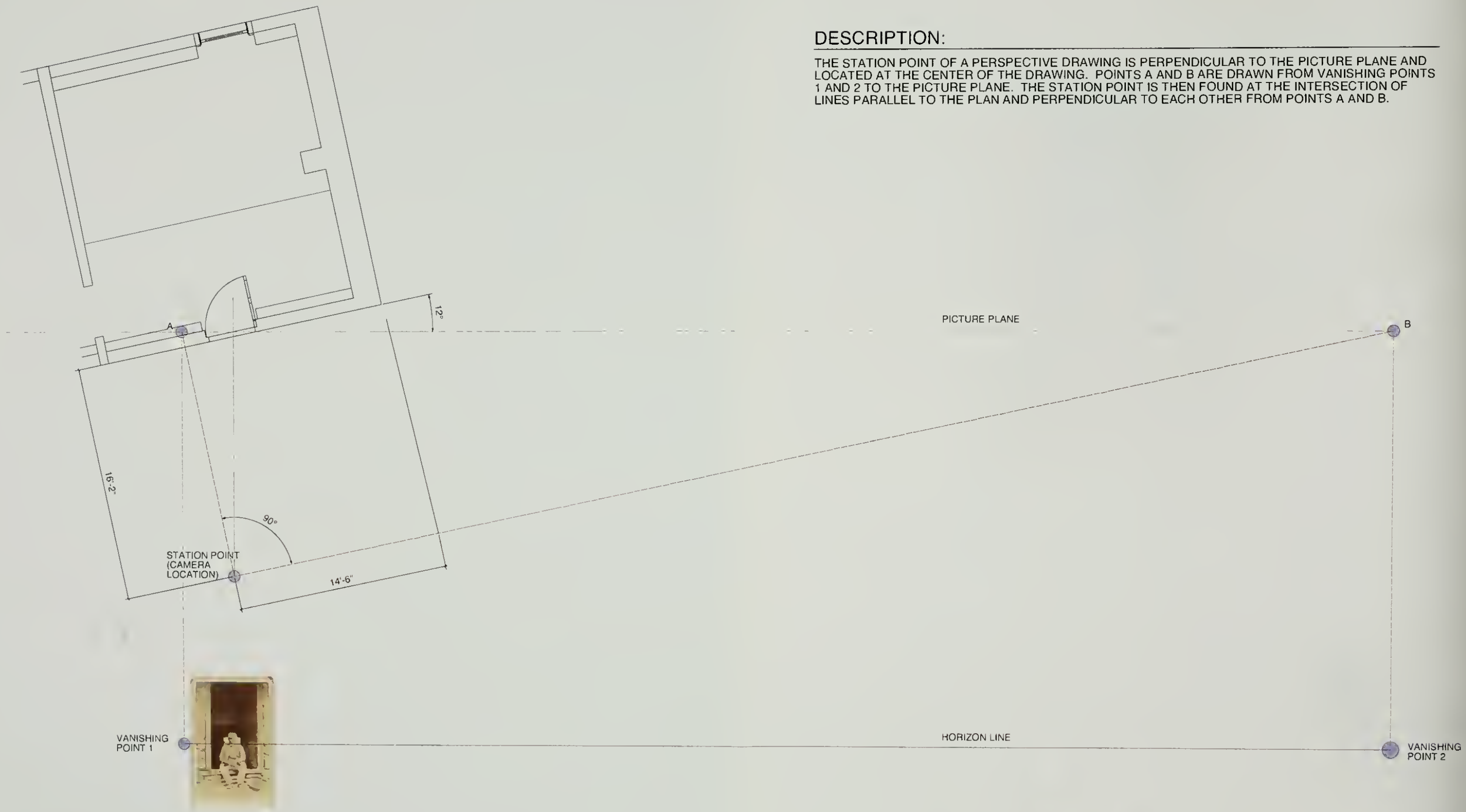
DATE: 13 JANUARY 2003

SHEET NO: 1 OF 10



DESCRIPTION:

THE STATION POINT OF A PERSPECTIVE DRAWING IS PERPENDICULAR TO THE PICTURE PLANE AND LOCATED AT THE CENTER OF THE DRAWING. POINTS A AND B ARE DRAWN FROM VANISHING POINTS 1 AND 2 TO THE PICTURE PLANE. THE STATION POINT IS THEN FOUND AT THE INTERSECTION OF LINES PARALLEL TO THE PLAN AND PERPENDICULAR TO EACH OTHER FROM POINTS A AND B.



UNCLE JOE PHOTO SHOWING DETERMINATION OF STATION POINT

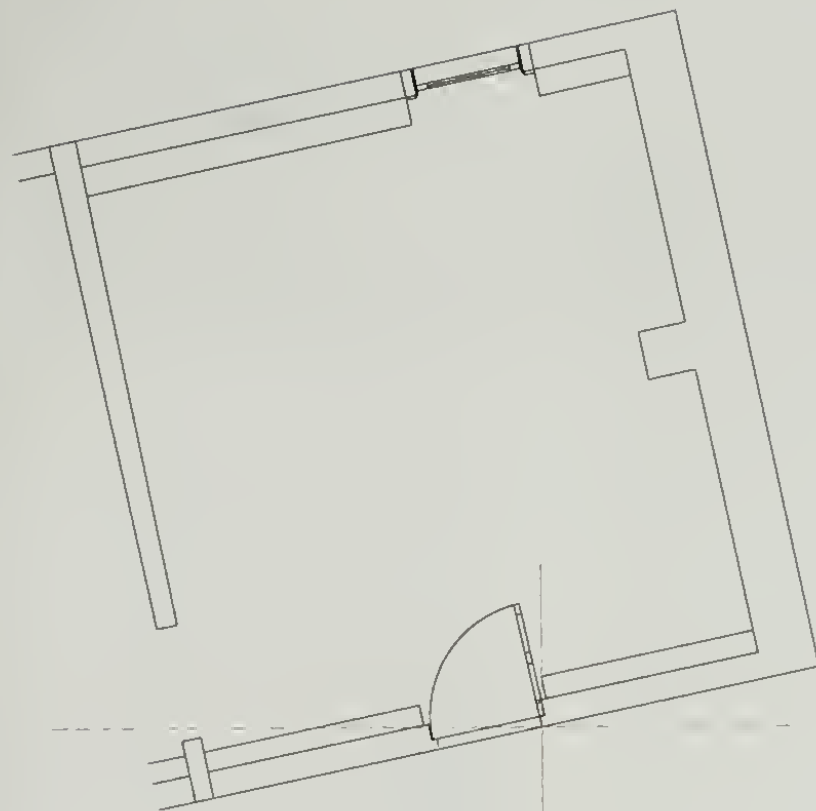


VOLZ &  
ASSOCIATES, INC  
1105 West 42nd Street  
AUSTIN, TEXAS 78756  
(512) 476-0433  
FAX (512) 476-2198

ARLINGTON HOUSE  
NORTH DEPENDENCY  
PHOTO STUDY

DATE: 13 JANUARY 2003

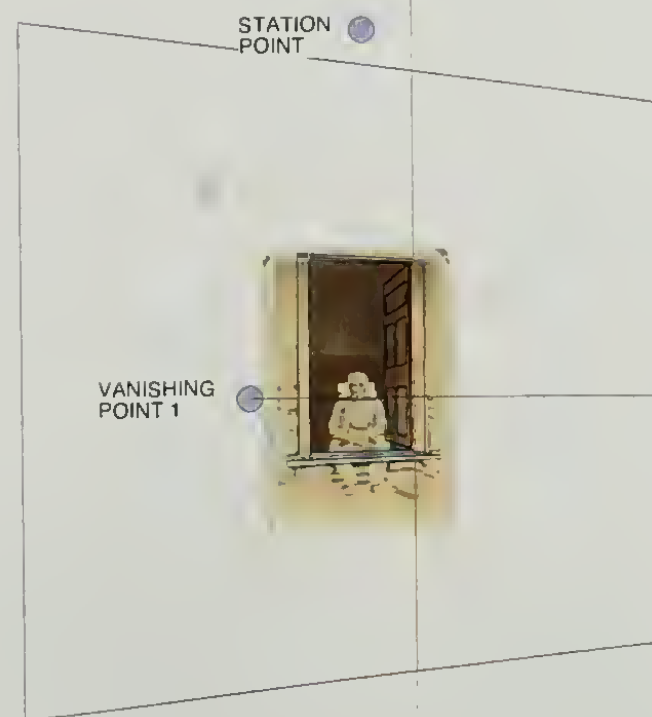
SHEET NO. 2 OF 10



## DESCRIPTION:

THE DOOR HEIGHT, WIDTH, AND LOCATION WERE DETERMINED BY DRAWING PROJECTORS TO THEIR RESPECTIVE VANISHING POINTS. AT THE POINT WHERE THE PROJECTORS CROSS THE VERTICAL MEASURING LINE, HORIZONTAL LINES ARE CARRIED TO THE ELEVATION AT ACCURATE HEIGHTS. VERTICAL LINES ARE THEN CARRIED FROM THEIR LOCATION ON THE PHOTOGRAPH TO THE PICTURE PLANE. AT THE POINT WHERE THE VERTICAL LINES INTERSECT THE PICTURE PLANE, LINES ARE CARRIED FROM THE STATION POINT TO THE PLAN, PROVIDING ACCURATE LOCATION AND WIDTH OF THE DOOR.

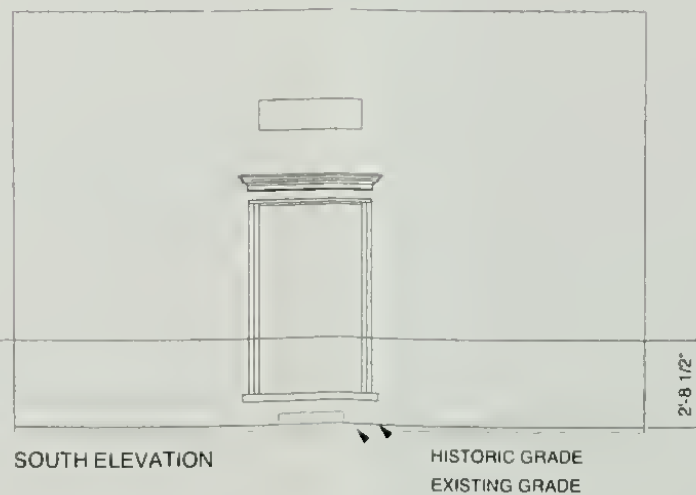
PICTURE PLANE



VANISHING POINT 1

STATION POINT

VERTICAL MEASURING LINE



SOUTH ELEVATION

HISTORIC GRADE  
EXISTING GRADE

HORIZON LINE

VANISHING POINT 2

UNCLE JOE PHOTO SHOWING LOCATION OF  
DOOR IN PLAN AND ELEVATION



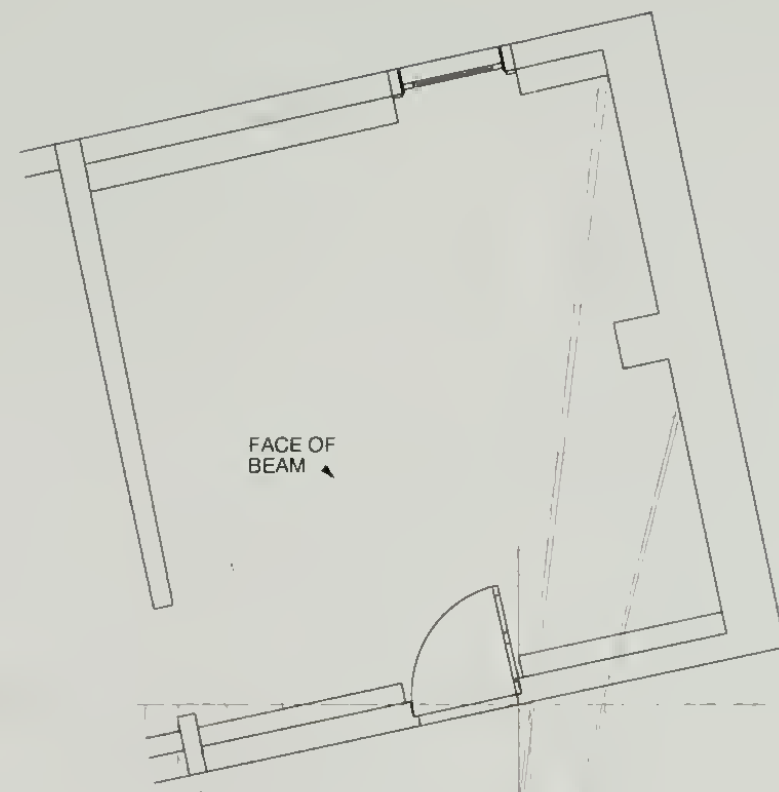
VOLZ &  
ASSOCIATES, INC.

1105 West 42nd Street  
AUSTIN, TEXAS 78756  
(512) 476-0433  
FAX (512) 476-2198

ARLINGTON HOUSE  
NORTH DEPENDENCY  
PHOTO STUDY

DATE:  
13 JANUARY 2003

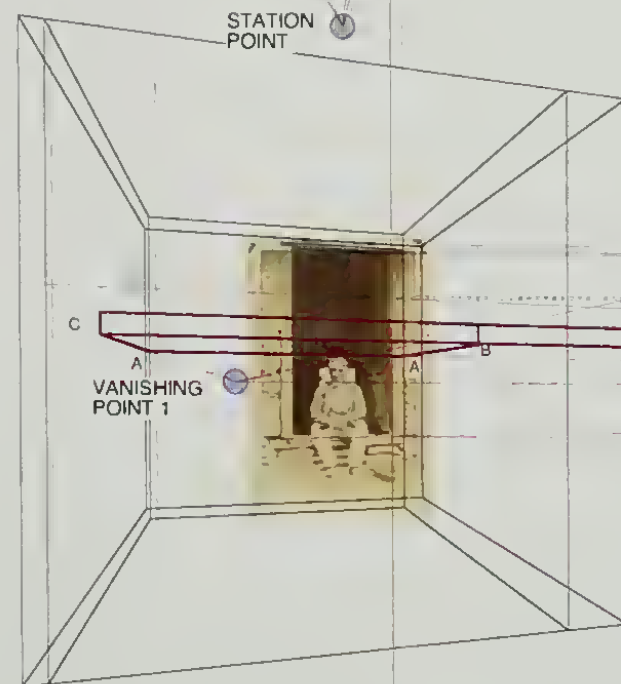
SHEET NO.  
3 OF 10



# DESCRIPTION:

THE HEIGHT AND LOCATION OF THE FACE OF THE LOFT FLOOR BEAM WERE DETERMINED BY DRAWING PROJECTORS EVIDENT IN THE PHOTOGRAPH TO THEIR RESPECTIVE VANISHING POINTS. IT WAS ASSUMED THAT LINE A-A WAS THE BOTTOM OF THE BEAM AT THE NORTH WALL. FROM THIS POINT, EAST-WEST LINES WERE DRAWN FROM THE BACK WALL FORWARD (LINES A-B & A-C) FROM VANISHING POINT 1. LINE B-C, NOTING THE FACE OF THE BEAM, WAS THEN CARRIED TO VANISHING POINT 2. THE POINT OF INTERSECTION BETWEEN LINES A-B AND B-C AT THE EAST SIDE AND LINES A-C AND B-C AT THE WEST SIDE DENOTE THE LOCATION OF THE FACE BEAM ON THESE WALLS.

PICTURE PLANE



HORIZONLINE

VANISHING POINT 2

VERTICAL MEASURING LINE

UNCLE JOE PHOTO SHOWING LOCATION OF BEAM IN PLAN AND ELEVATION



VOLZ &  
ASSOCIATES, INC.

1105 West 42nd Street  
AUSTIN, TEXAS 78756  
(512) 476-0433  
FAX (512) 476-2198

ARLINGTON HOUSE  
NORTH DEPENDENCY  
PHOTO STUDY

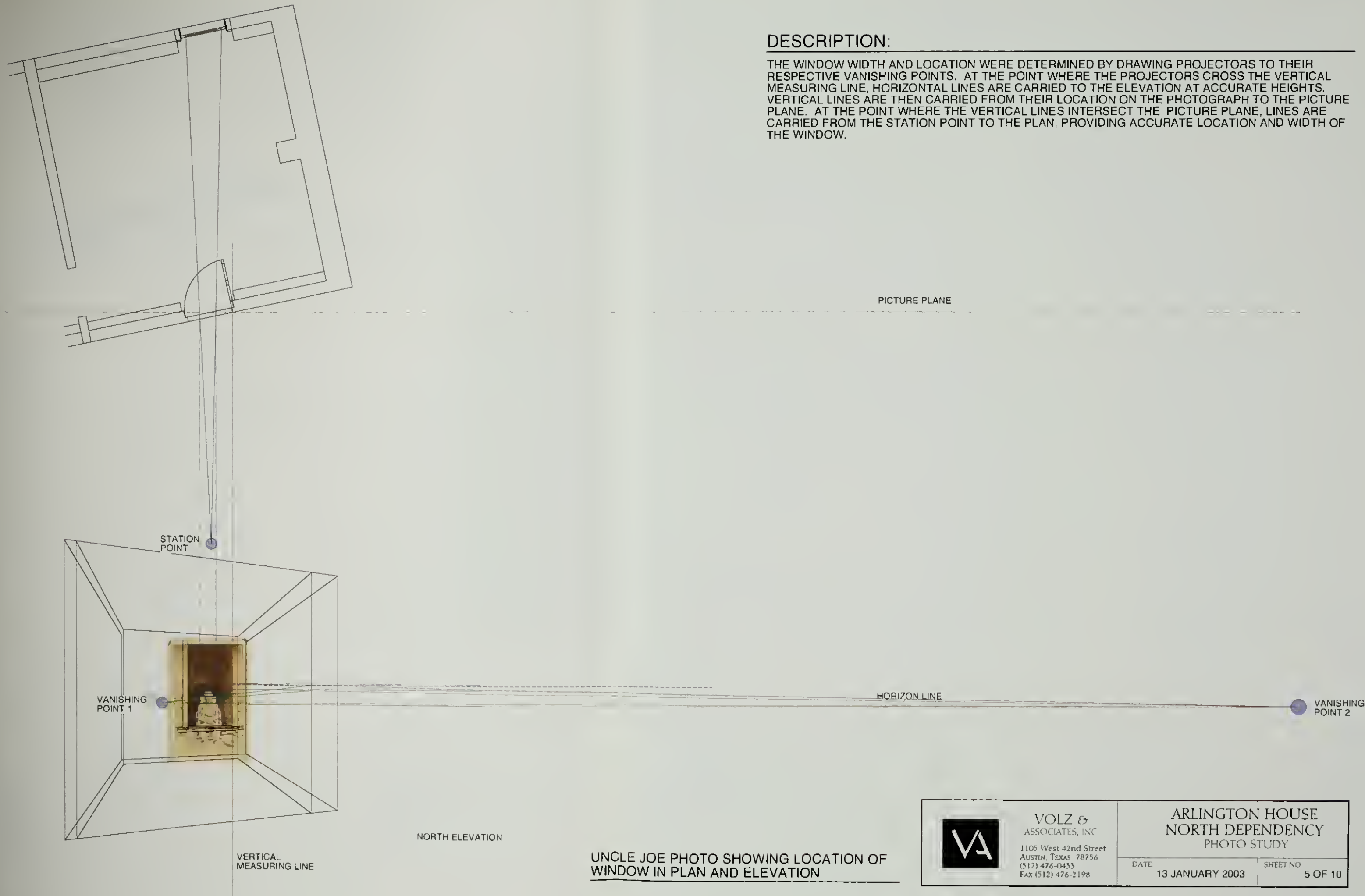
DATE: 13 JANUARY 2003

SHEET NO: 4 OF 10




**DESCRIPTION:**

THE WINDOW WIDTH AND LOCATION WERE DETERMINED BY DRAWING PROJECTORS TO THEIR RESPECTIVE VANISHING POINTS. AT THE POINT WHERE THE PROJECTORS CROSS THE VERTICAL MEASURING LINE, HORIZONTAL LINES ARE CARRIED TO THE ELEVATION AT ACCURATE HEIGHTS. VERTICAL LINES ARE THEN CARRIED FROM THEIR LOCATION ON THE PHOTOGRAPH TO THE PICTURE PLANE. AT THE POINT WHERE THE VERTICAL LINES INTERSECT THE PICTURE PLANE, LINES ARE CARRIED FROM THE STATION POINT TO THE PLAN, PROVIDING ACCURATE LOCATION AND WIDTH OF THE WINDOW.



UNCLE JOE PHOTO SHOWING LOCATION OF WINDOW IN PLAN AND ELEVATION

	VOLZ & ASSOCIATES, INC. 1105 West 42nd Street AUSTIN, TEXAS 78756 (512) 476-0433 Fax (512) 476-2198	ARLINGTON HOUSE NORTH DEPENDENCY PHOTO STUDY	
		DATE: 13 JANUARY 2003	SHEET NO: 5 OF 10

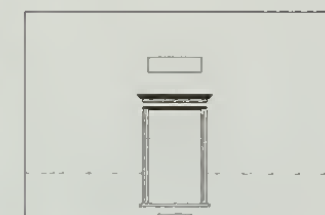


VERTICAL MEASURING LINE

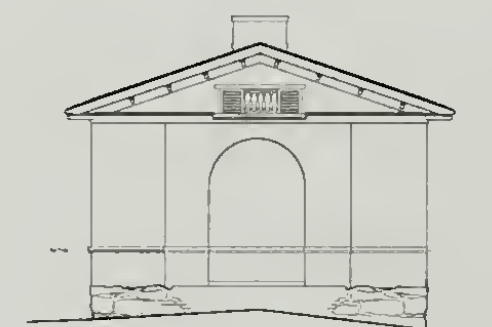
PHOTOGRAPH OF THE ARLINGTON HOUSE AND  
NORTH DEPENDENCY CIRCA THE CIVIL WAR.

## DESCRIPTION:

THIS PHOTOGRAPH WAS USED TO VERIFY THE DOOR HEIGHT AT THE SOUTH ELEVATION SEEN IN THE UNCLE JOE PHOTO. A KNOWN HEIGHT AT THE EAST ARCH WAS USED TO ESTABLISH THE MEASURING LINE IN ORDER TO PROJECT ACCURATE HEIGHTS. THE LEFT VANISHING POINT IS AT SUCH A DISTANCE THAT THIS PHOTOGRAPH APPEARS AS A ONE-POINT PERSPECTIVE. LINES FROM THE DOOR WERE PROJECTED TO THE SOUTHEAST CORNER AND THEN TAKEN TO VANISHING POINT 1. THE POINT WHERE THE PROJECTORS CROSS THE MEASURING LINE ESTABLISHES THE ACCURATE HEIGHT FOR THE DOOR. THESE POINTS WERE THEN CARRIED TO THE ELEVATION.



SOUTH ELEVATION



EAST ELEVATION



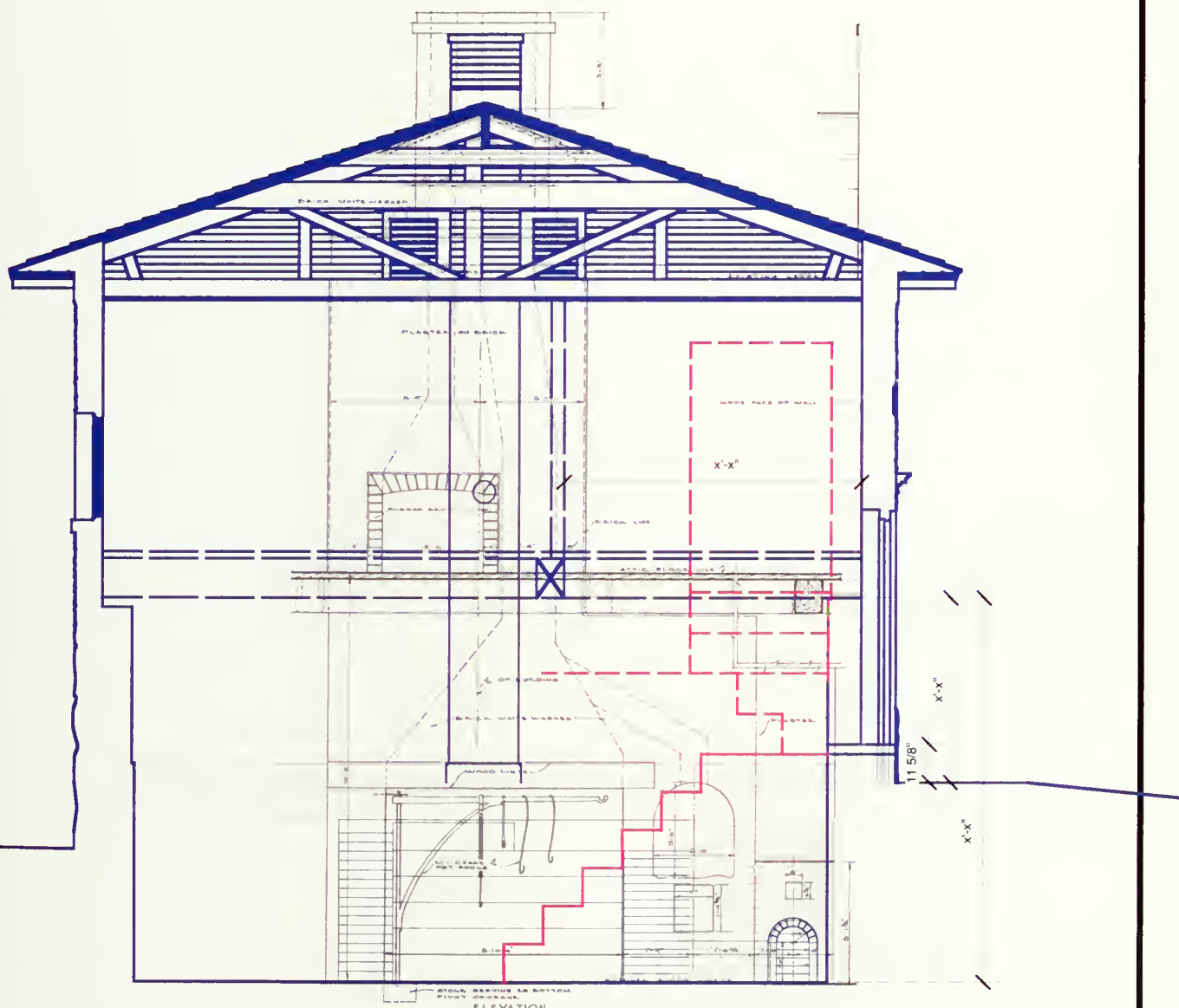
VOLZ &  
ASSOCIATES, INC.

1105 West 42nd Street  
AUSTIN, TEXAS 78756  
(512) 476-0433  
Fax (512) 476-2198

ARLINGTON HOUSE  
NORTH DEPENDENCY  
PHOTO STUDY

DATE  
13 JANUARY 2003

SHEET NO.  
6 OF 10



1 SOUTH ELEVATION  
SCALE 1/4" = 1'-0"



VOLZ &  
ASSOCIATES, INC.

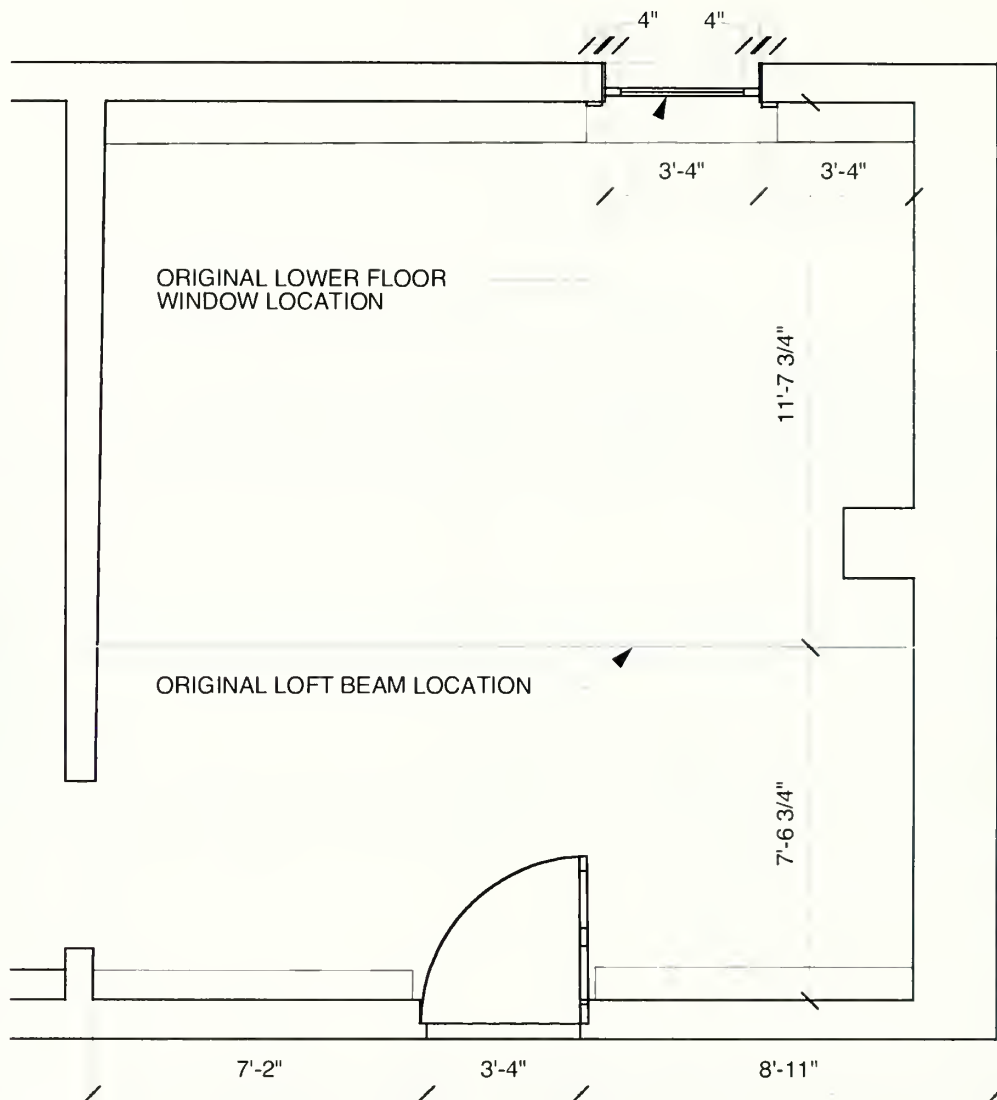
1105 West 42nd Street  
AUSTIN, TEXAS 78756  
(512) 476-0433  
FAX (512) 476-2198

# ARLINGTON HOUSE NORTH DEPENDENCY PHOTO STUDY

DATE:  
13 JANUARY 2003

SHEET NO:  
7 OF 10





NOTE: JAMBS OF DOOR AND WINDOW ARE DIAGRAMMATICALLY SHOWN TO ILLUSTRATE DIMENSIONS CALCULATED FROM THE PHOTOGRAPH.

# 1 FLOOR PLAN

SCALE 1/4" = 1'-0"



VOLZ &  
ASSOCIATES, INC.

1105 West 42nd Street  
AUSTIN, TEXAS 78756  
(512) 476-0433  
FAX (512) 476-2198

## ARLINGTON HOUSE NORTH DEPENDENCY PHOTO STUDY

DATE:  
13 JANUARY 2003

SHEET NO:  
8 OF 10

LOFT BEAM  
LINE OF INTERIOR  
LEDGE  
HISTORIC LINE OF  
STONE  
  
EXISTING GRADE

1

## NORTH ELEVATION

SCALE 1/4" = 1'-0"



VOLZ &  
ASSOCIATES, INC.

1105 West 42nd Street  
AUSTIN, TEXAS 78756  
(512) 476-0433  
FAX (512) 476-2198

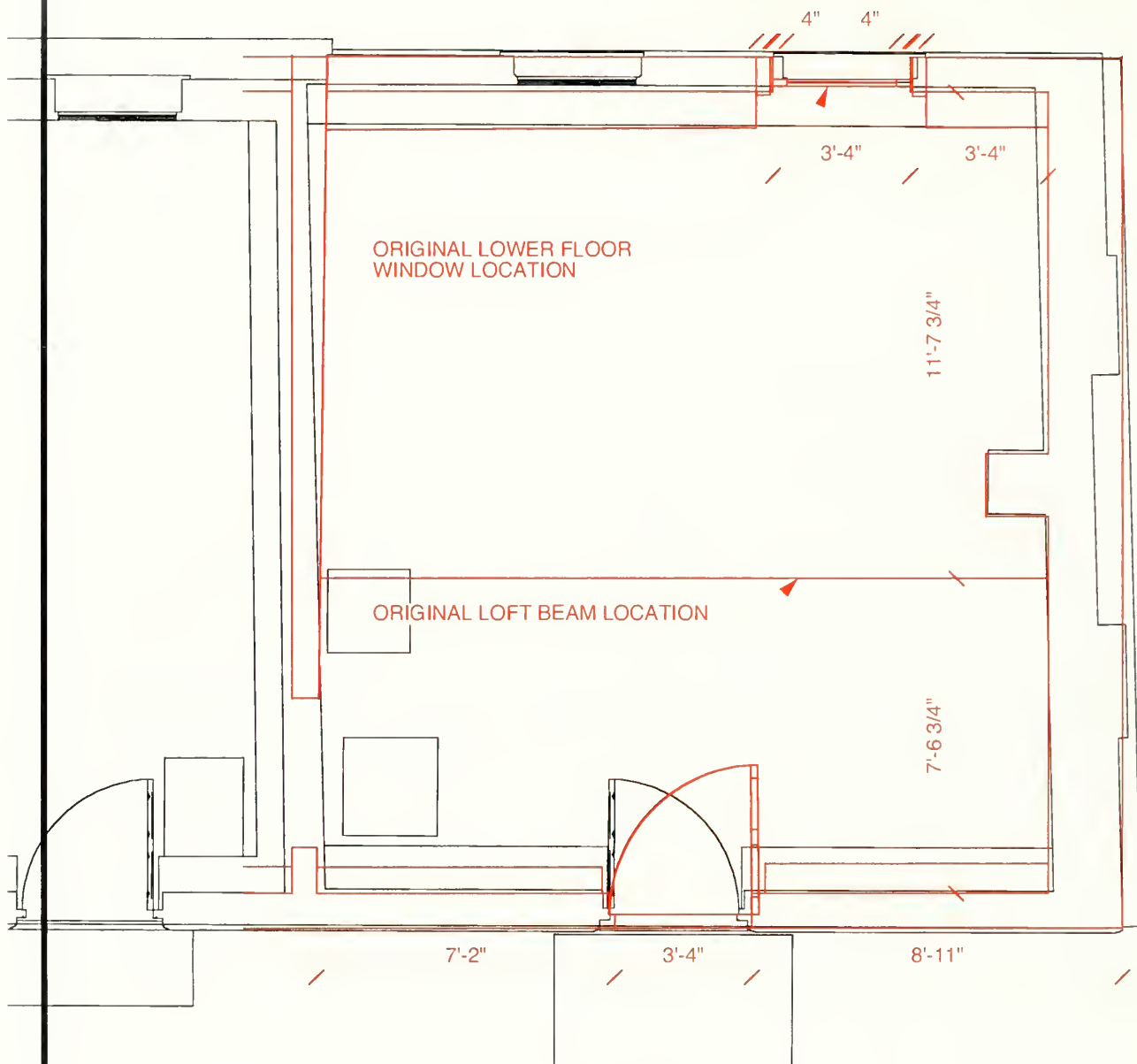
## ARLINGTON HOUSE NORTH DEPENDENCY PHOTO STUDY

DATE:

13 JANUARY 2003

SHEET NO:

9 OF 10



PERSPECTIVE MODEL FLOOR PLAN  
W/ HABS PLAN OVERLAYED

1

SCALE 1/4" = 1'-0"



VOLZ &  
ASSOCIATES, INC.

1105 West 42nd Street  
AUSTIN, TEXAS 78756  
(512) 476-0433  
FAX (512) 476-2198

ARLINGTON HOUSE  
NORTH DEPENDENCY  
PHOTO STUDY

DATE:

13 JANUARY 2003

SHEET NO:

10 OF 10



# Appendix H

## *Floor Study*

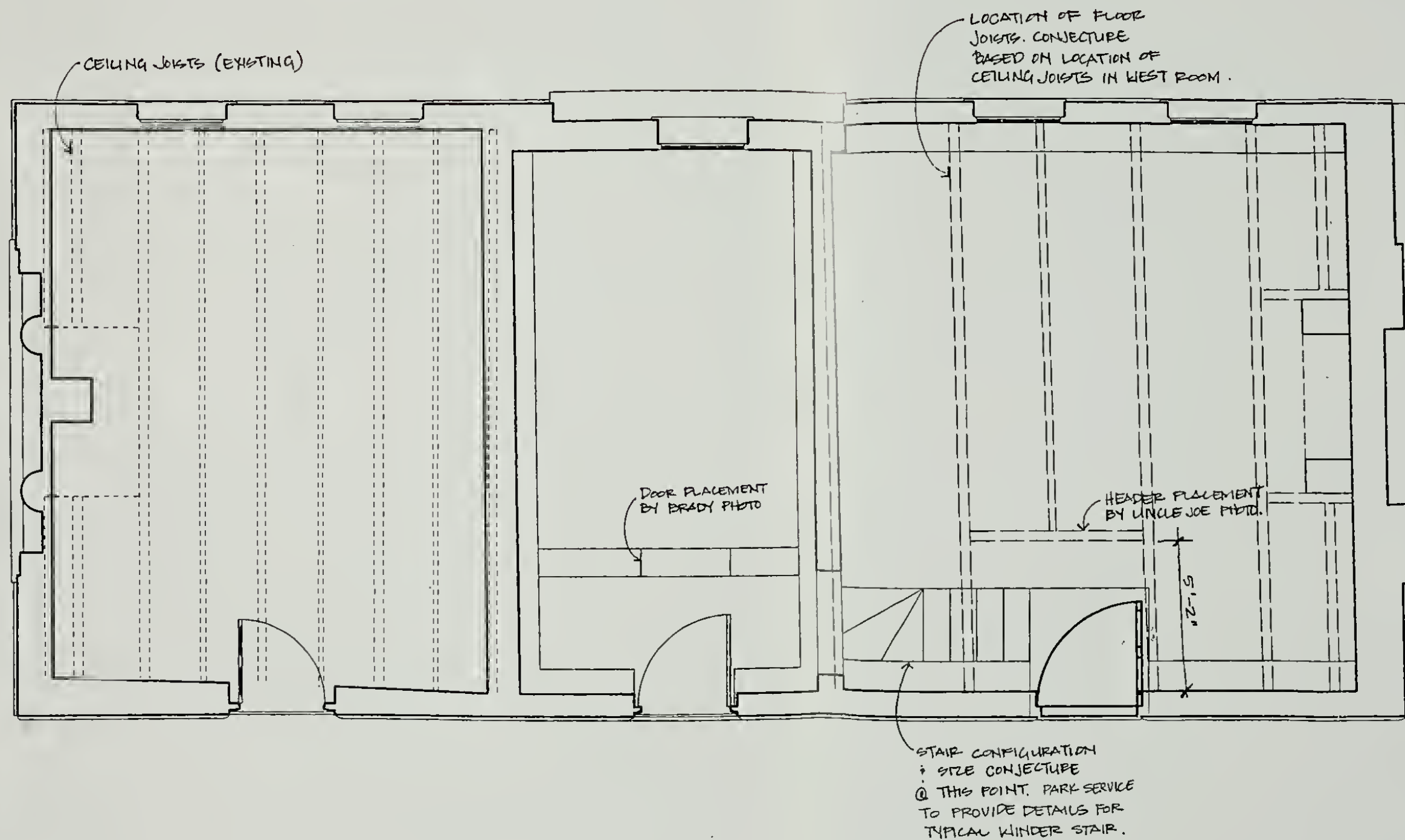
---



1

# NORTH DEPENDENCY FLOOR PLAN

SCALE 1/4" = 1'-0"



## PROGRESS PRINT NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

## ARLINGTON HOUSE INTERIOR RESTORATION OF NORTH & SOUTH DEPENDENCIES

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA



**VOLZ &  
ASSOCIATES, INC.**

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 FAX (512) 476-2198

PROJECT NO: 014-02

DATE: 05/12/03

REV:

SHEET NO:

ca. 1860s PLAN

SHEET NAME:



PROGRESS PRINT

NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
INTERIOR RESTORATION OF NORTH &  
SOUTH DEPENDENCIES  
ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 FAX (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 05/12/03

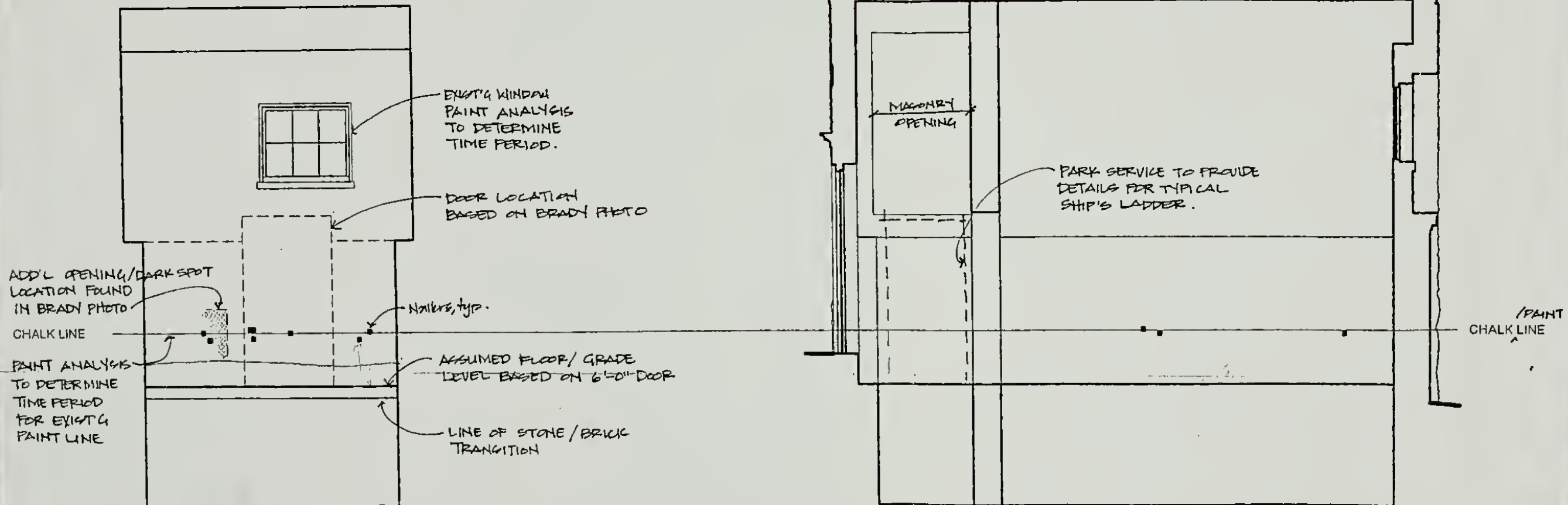
REV:

SHEET NO.  
ca. 1860s ELEVATIONS

SHEET NAME:

1 NORTH DEPENDENCY, CENTER ROOM  
NORTH AND WEST INTERIOR ELEVATIONS

SCALE 1/4"=1'-0"

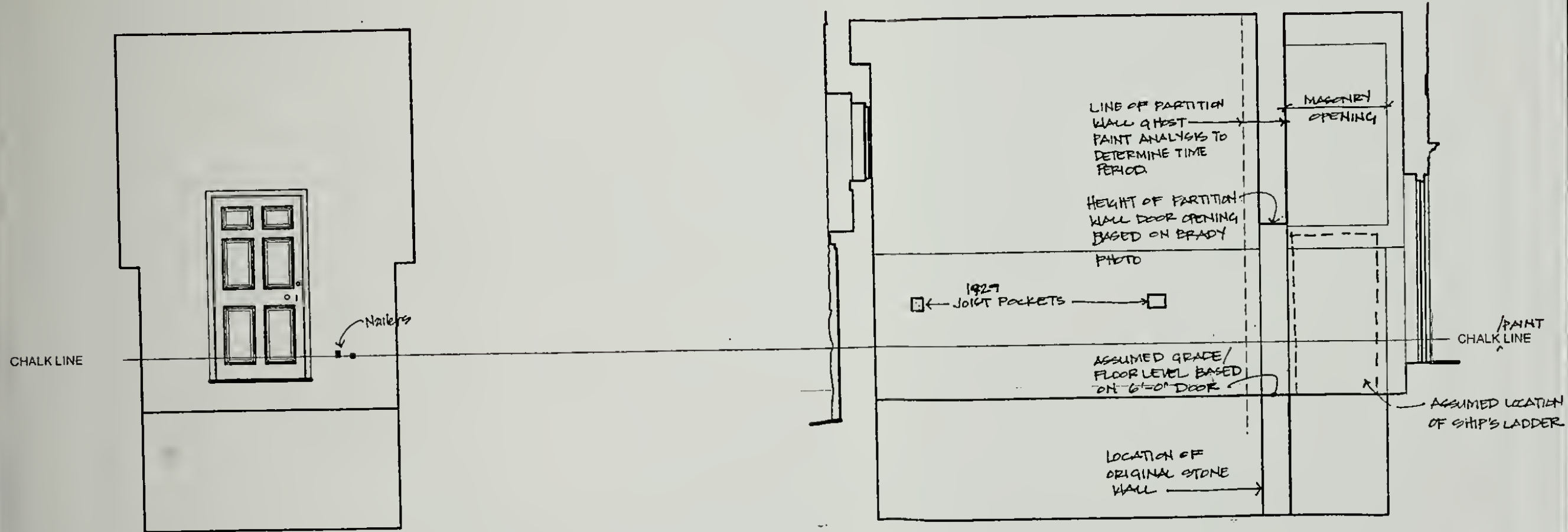


**ARLINGTON HOUSE**  
**INTERIOR RESTORATION OF NORTH &**  
**SOUTH DEPENDENCIES**  
 ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

**VOLZ & ASSOCIATES, INC.**  
 ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
 1105 West 42nd Street AUSTIN, TEXAS 78756  
 (512) 476-0433 Fax (512) 476-2198



PROJECT NO:	014-02
DATE:	05/12/03
REV:	
SHEET NO:	ca. 1860s ELEVATIONS
SHEET NAME:	



**1** NORTH DEPENDENCY, CENTER ROOM  
 SOUTH AND EAST INTERIOR ELEVATIONS  
 SCALE 1/4"=1'-0"

**PROGRESS PRINT**  
NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

**ARLINGTON HOUSE**  
**INTERIOR RESTORATION OF NORTH & SOUTH DEPENDENCIES**

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

**VOLZ & ASSOCIATES, INC.**



ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 FAX (512) 476-2198

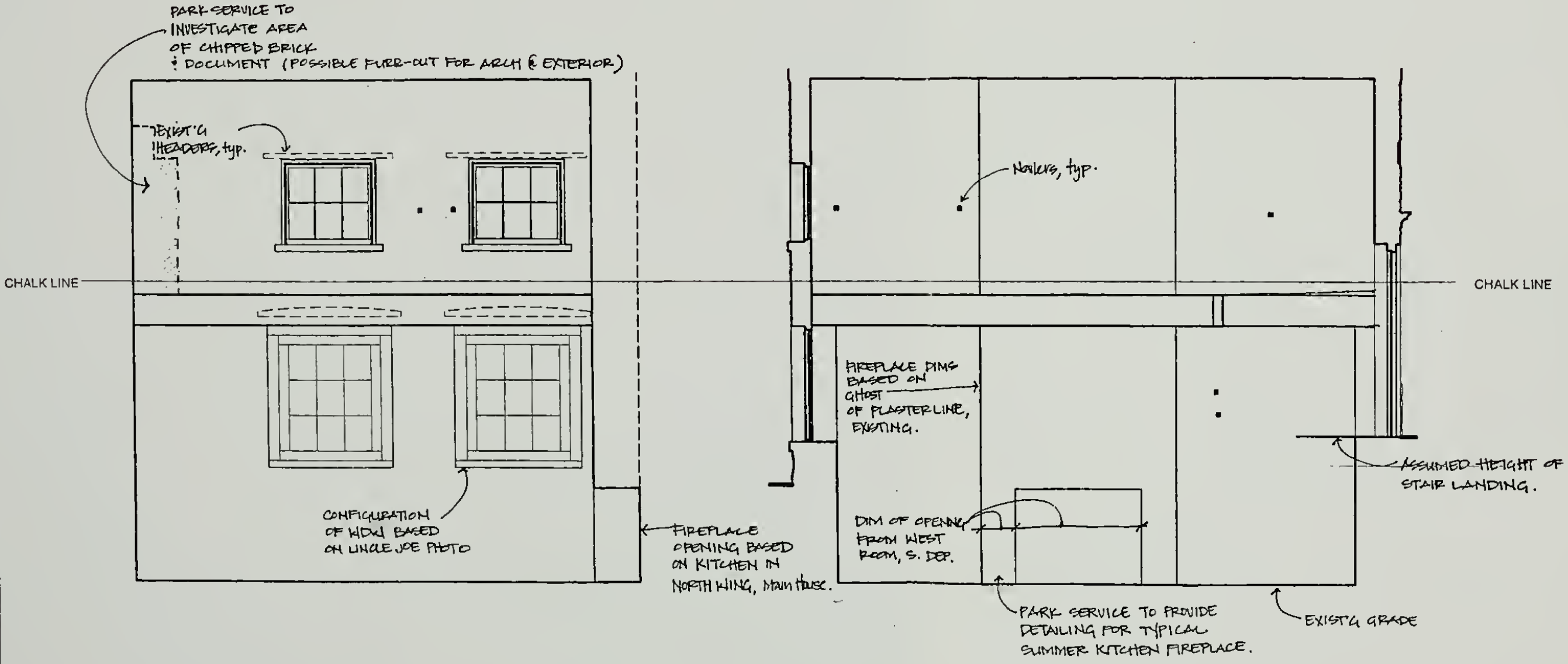
PROJECT NO: 014-02

DATE: 05/12/03

REV:

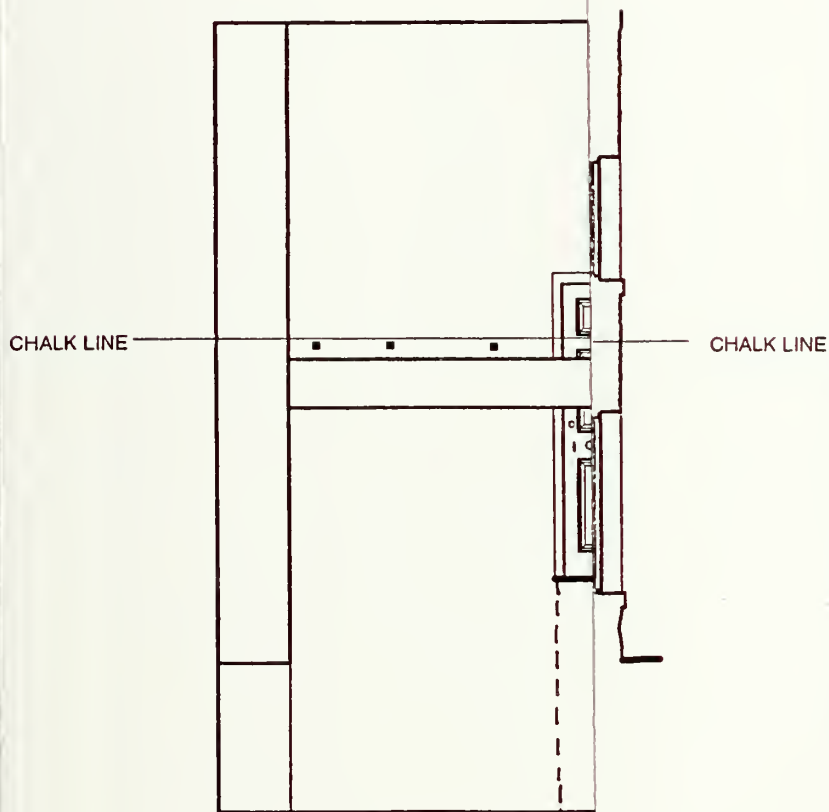
SHEET NO:  
ca. 1860s ELEVATIONS

SHEET NAME:



**1** NORTH DEPENDENCY, EAST ROOM  
NORTH AND WEST INTERIOR ELEVATIONS  
SCALE 1/8" = 1'-0"





NORTH DEPENDENCY, EAST  
SOUTH AND EAST INTERIOR

1

SCALE 1/4" = 1'-0"

# PROGRESS PRINT NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
INTERIOR RESTORATION OF NORTH &  
SOUTH DEPENDENCIES  
ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 Fax (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 05/12/03

REV:

SHEET NO:  
ca. 1860s ELEVATIONS

SHEET NAME:

**PROGRESS PRINT**  
NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

**ARLINGTON HOUSE**  
**INTERIOR RESTORATION OF NORTH &  
SOUTH DEPENDENCIES**

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA



**VOLZ &  
ASSOCIATES, INC.**

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 FAX (512) 476-2198

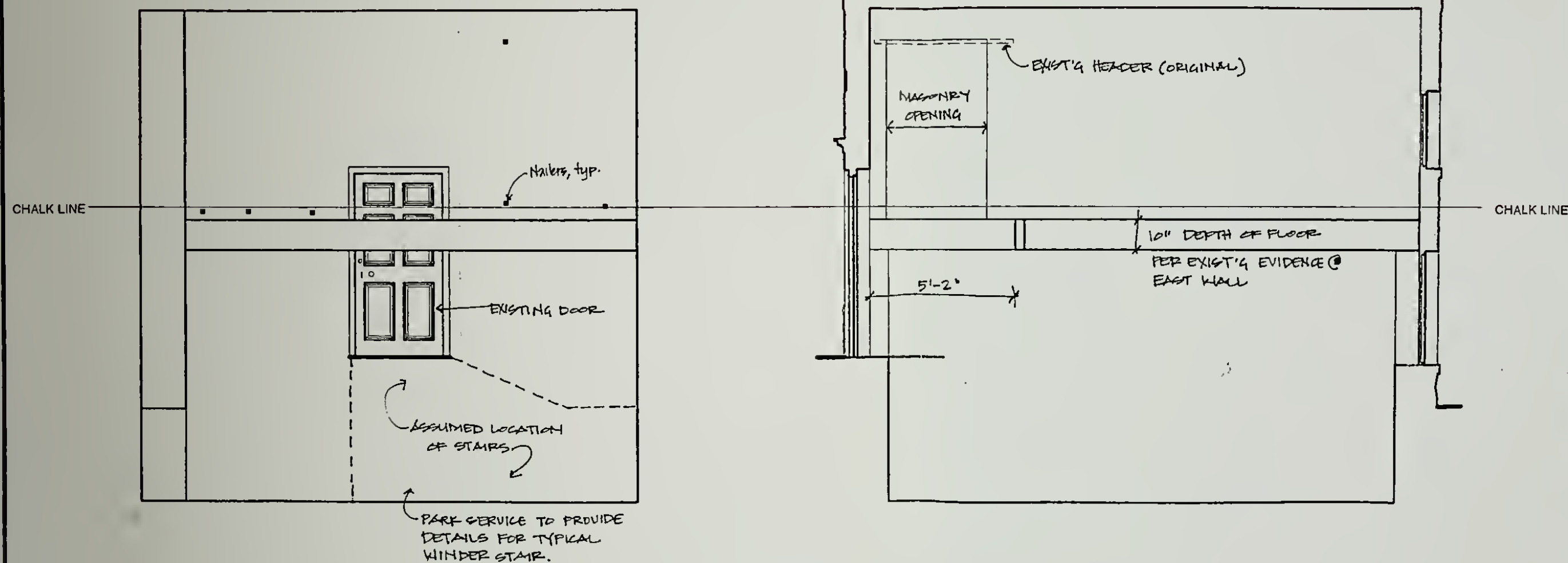
PROJECT NO: 014-02

DATE: 05/12/03

REV:

SHEET NO:  
ca. 1860s ELEVATIONS

SHEET NAME:



**1** NORTH DEPENDENCY, EAST ROOM  
SOUTH AND EAST INTERIOR ELEVATIONS

SCALE 1/4" = 1'-0"

# Appendix I

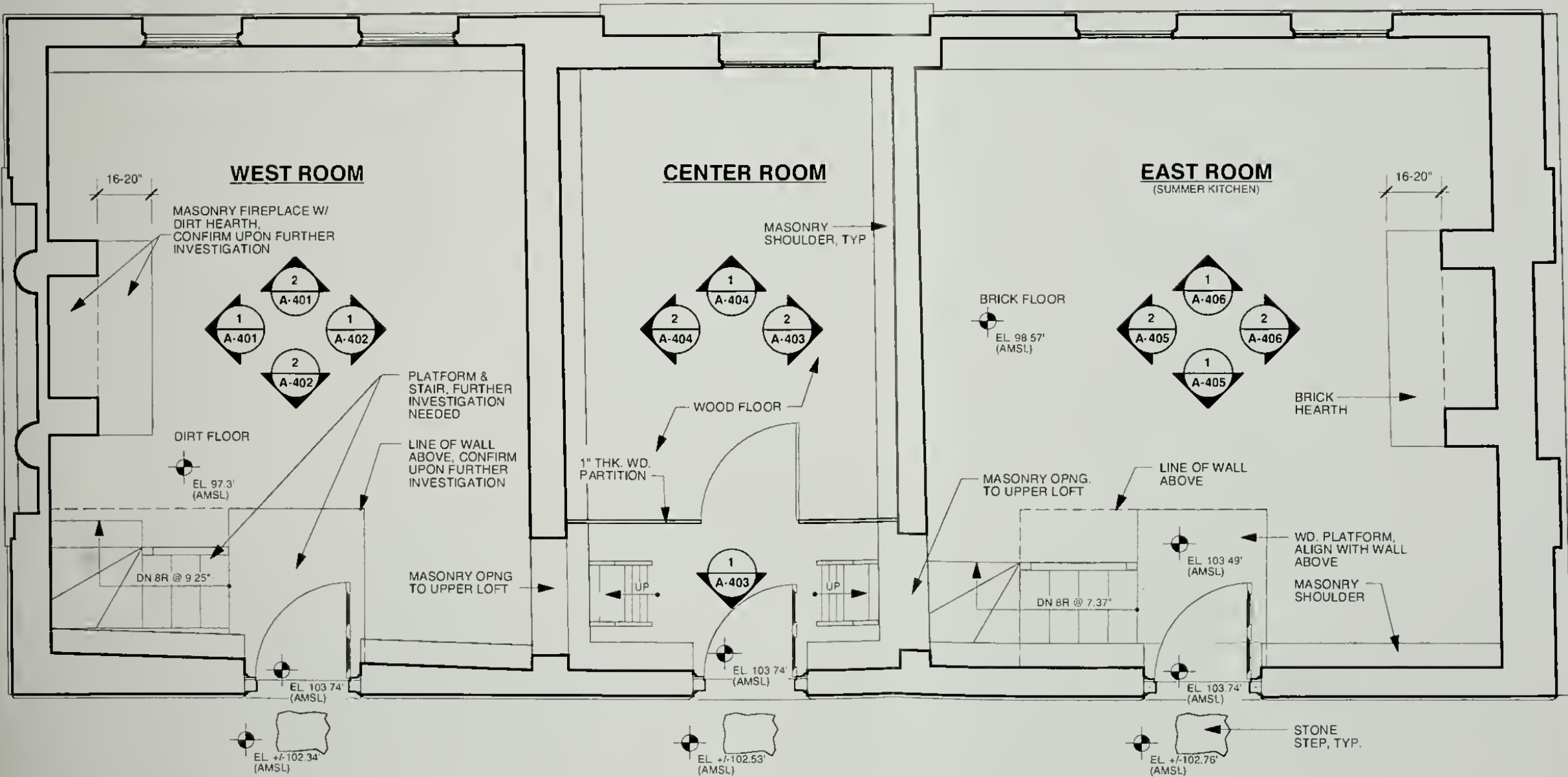
*Period and  
Rehabilitation Drawings*





GENERAL NOTES

- A. INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- B. ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.
- C. DETAILS OF WEST ROOM TO BE CONFIRMED BASED ON FUTURE ARCHITECTURAL INVESTIGATION.



**1 NORTH DEPENDENCY FLOOR PLAN - 1860**

SCALE 1/4" = 1'-0"



**PROGRESS PRINT**  
**NOT FOR CONSTRUCTION**

John Volz, Architect  
Texas License No: 8405

**ARLINGTON HOUSE**  
**RESTORATION OF**  
**NORTH & SOUTH DEPENDENCIES**

ARLINGTON NATIONAL CEMETERY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street Austin, Texas 78756  
(512) 476-0435 Fax (512) 476-2198

**VOLZ & ASSOCIATES, INC.**



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:  
**NORTH DEPENDENCY FLOOR PLAN - 1860**

SHEET NO:

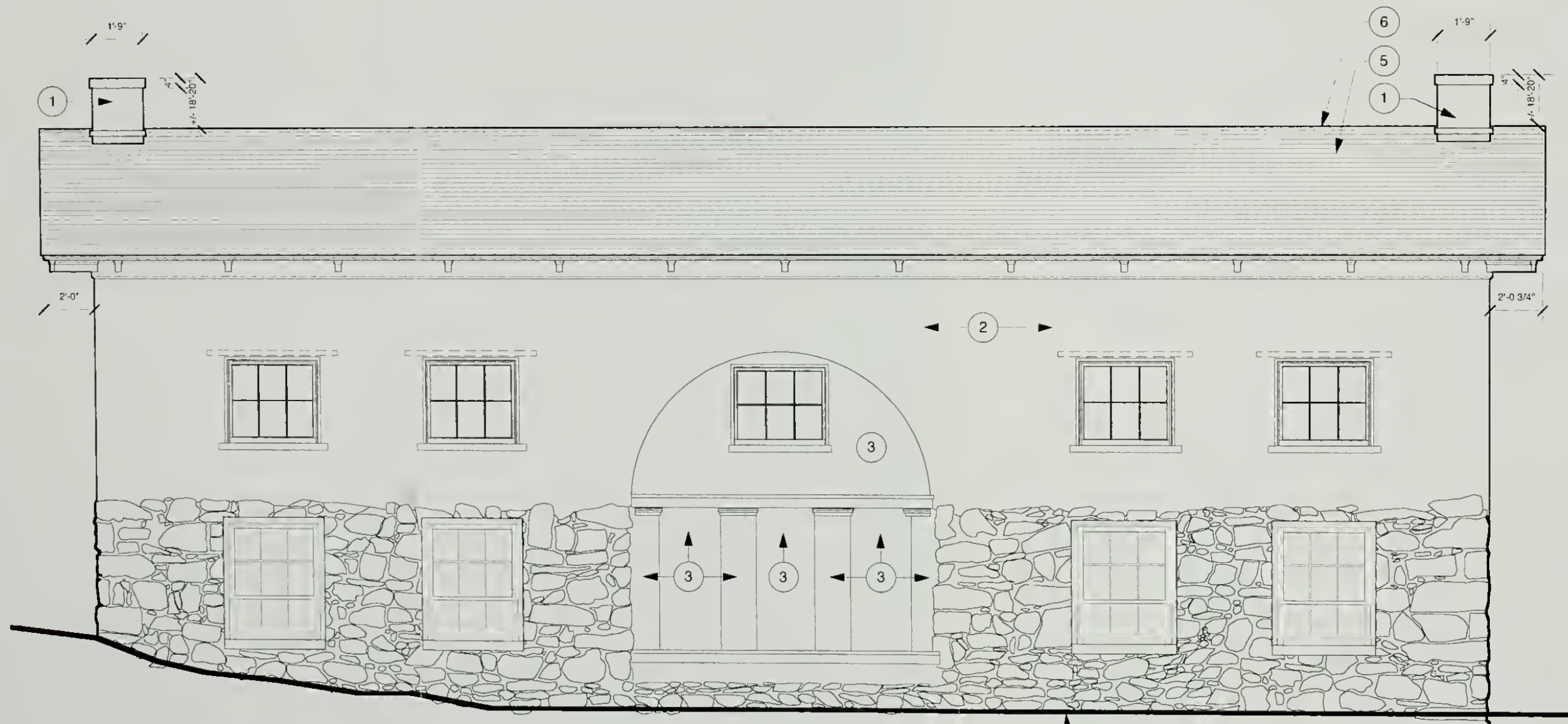
**A-101**

## GENERAL NOTES

- A. INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- B. ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.

## ELEVATION KEY NOTES:

1. BRICK CHIMNEY & MASONRY CAP WITH STUCCO FINISH.
2. ROUGH CAST STUCCO FINISH, PAINTED.
3. SMOOTH STUCCO FINSH, PAINTED.
4. BEADED ARCHITRAVE W/ MOLDED BACK BAND.
5. WOOD SHINGLE ON WOOD LATH.
6. 4" TO 6" RIDGE COMB.
7. DECORATIVE PAINTED PANEL.
8. RUBBLE STONE BASE.



**NORTH DEPENDENCY  
NORTH ELEVATION - 1860**

1

SCALE 1/4" = 1'-0"

--- APPROX. LINE OF  
HIST. GRADE

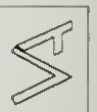
## PROGRESS PRINT NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES  
ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 FAX (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
NORTH ELEVATION - 1860

SHEET NO:

**A-201**

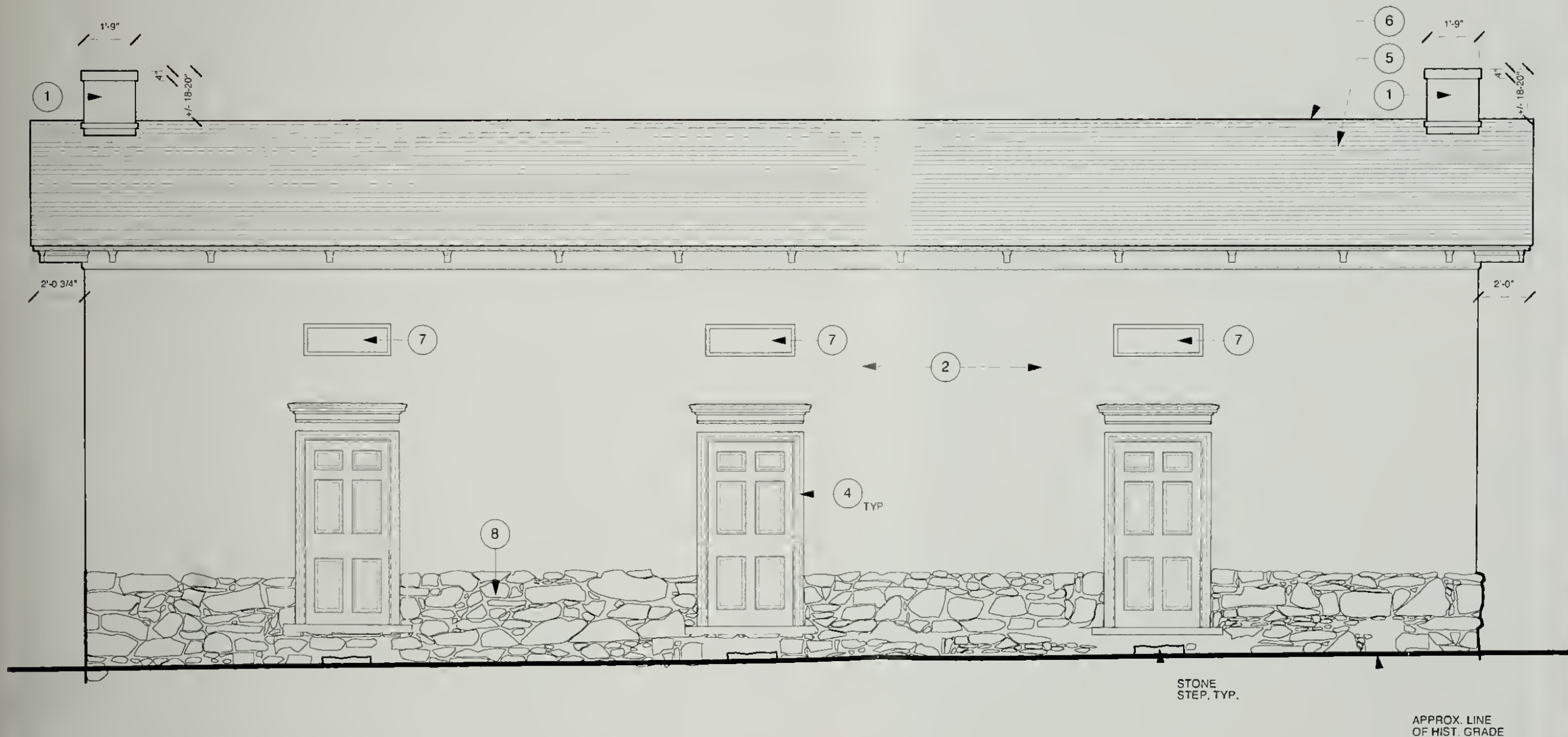


## GENERAL NOTES

- A. INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- B. ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.

## ELEVATION KEY NOTES:

1. BRICK CHIMNEY & MASONRY CAP WITH STUCCO FINISH.
2. ROUGH CAST STUCCO FINISH, PAINTED.
3. SMOOTH STUCCO FINISH, PAINTED.
4. BEADED ARCHITRAVE W/ MOLDED BACK BAND.
5. WOOD SHINGLE ON WOOD LATH.
6. 4" TO 6" RIDGE COMB.
7. DECORATIVE PAINTED PANEL.
8. RUBBLE STONE BASE.



**1 NORTH DEPENDENCY  
SOUTH ELEVATION - 1860**

SCALE 1/4" = 1'-0"

## PROGRESS PRINT NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES  
ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 Fax (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
SOUTH ELEVATION - 1860

SHEET NO:

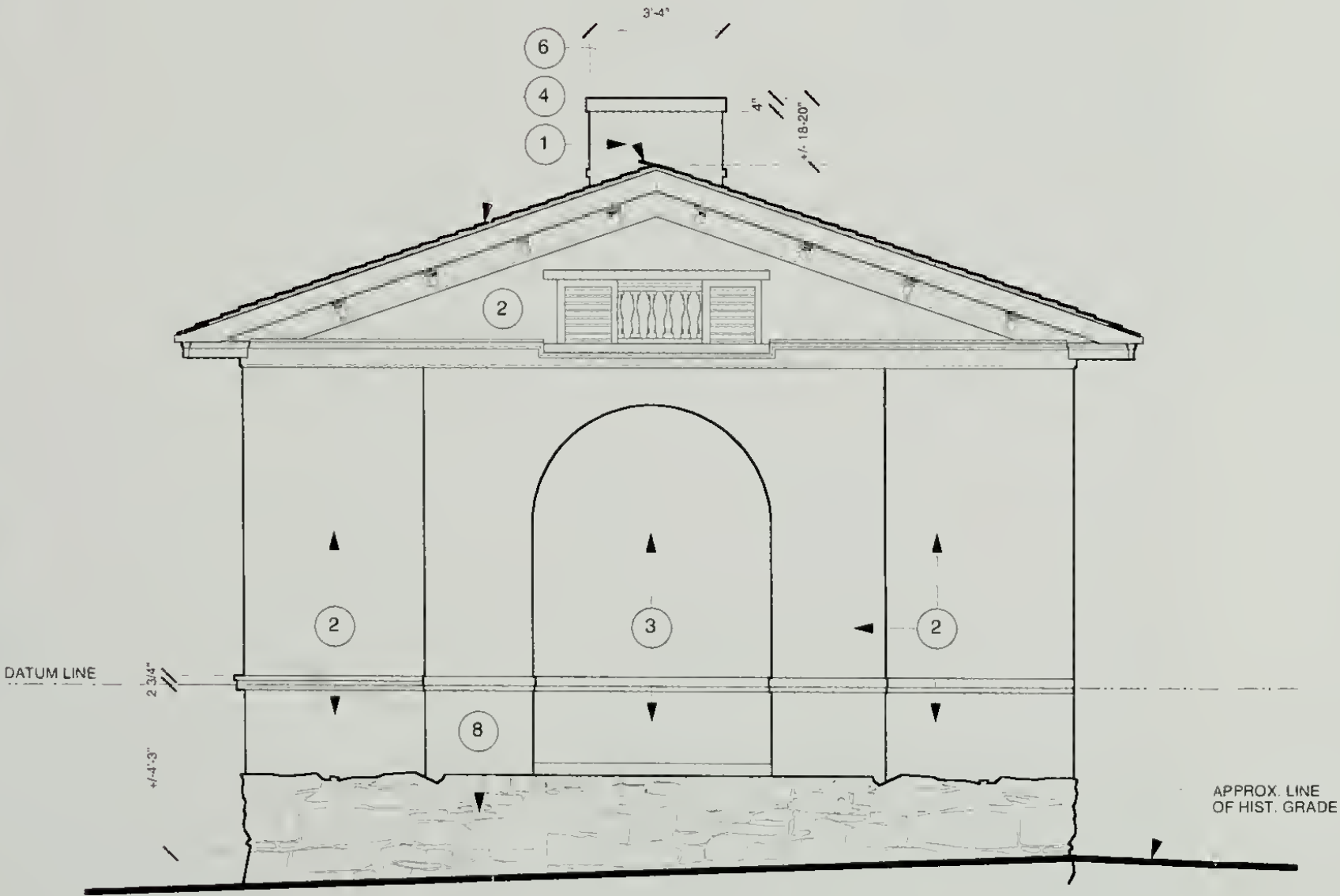
**A-202**

GENERAL NOTES

- A. INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- B. ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.

ELEVATION KEY NOTES:

1. BRICK CHIMNEY & MASONRY CAP WITH STUCCO FINISH.
2. ROUGH CAST STUCCO FINISH, PAINTED.
3. SMOOTH STUCCO FINSH, PAINTED.
4. BEADED ARCHITRAVE W/ MOLDED BACK BAND.
5. WOOD SHINGLE ON WOOD LATH.
6. 4" TO 6" RIDGE COMB.
7. DECORATIVE PAINTED PANEL.
8. RUBBLE STONE BASE.



NORTH DEPENDENCY  
EAST ELEVATION - 1860

SCALE 1/4" = 1'-0"

PROGRESS PRINT  
NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street Austin, Texas 78756  
(512) 476-0433 FAX (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
EAST ELEVATION - 1860

SHEET NO:

A-203



## GENERAL NOTES

- A. INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- B. ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.

## ELEVATION KEY NOTES:

1. BRICK CHIMNEY & MASONRY CAP WITH STUCCO FINISH.
2. ROUGH CAST STUCCO FINISH, PAINTED.
3. SMOOTH STUCCO FINISH, PAINTED.
4. BEADED ARCHITRAVE W/ MOLDED BACK BAND.
5. WOOD SHINGLE ON WOOD LATH.
6. 4" TO 6" RIDGE COMB.
7. DECORATIVE PAINTED PANEL.
8. RUBBLE STONE BASE.



**1** NORTH DEPENDENCY  
WEST ELEVATION - 1860  
SCALE 1/4" = 1'-0"

## PROGRESS PRINT NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES  
ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 FAX (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 10/01/04

REV:

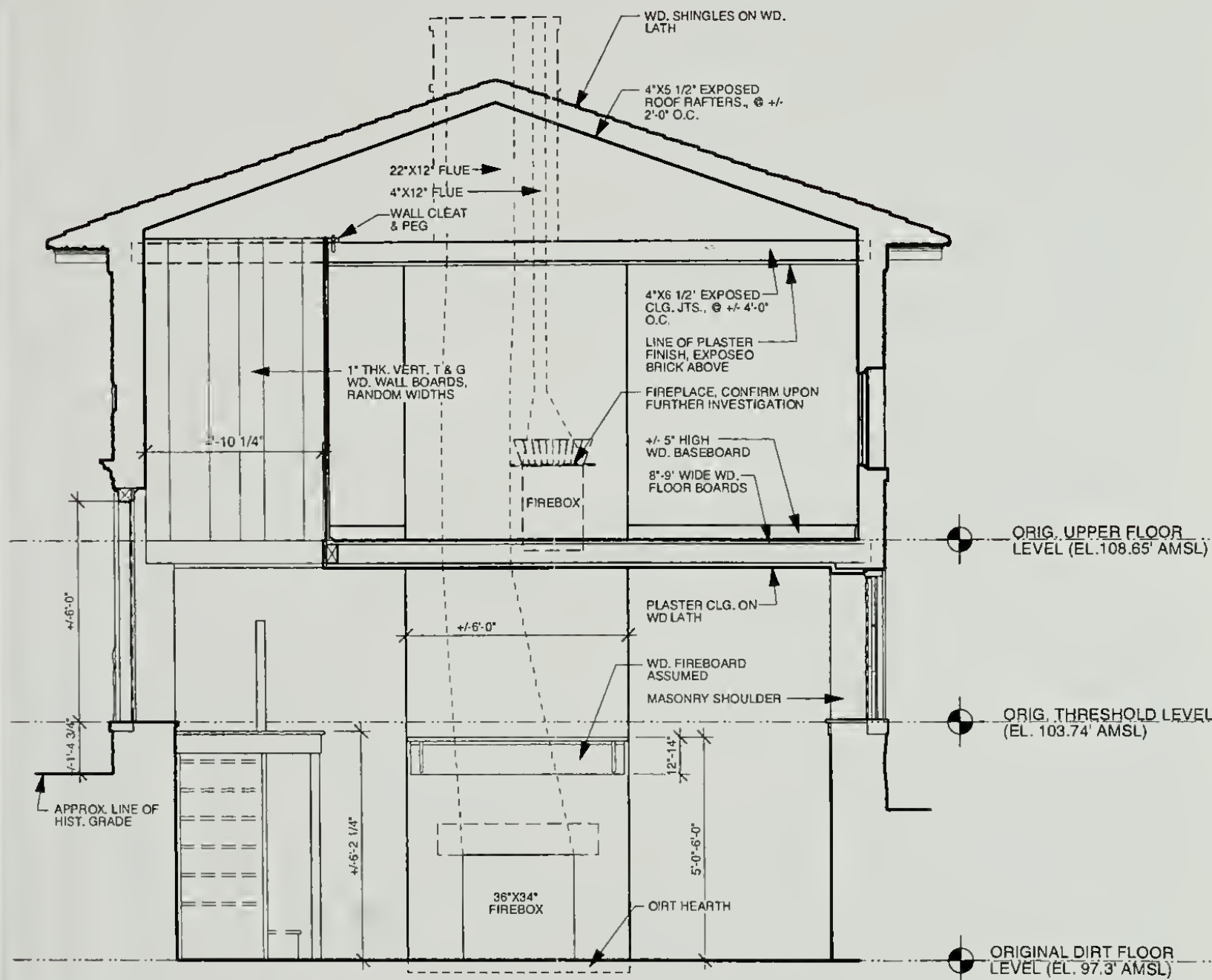
SHEET NAME:  
NORTH DEPENDENCY  
WEST ELEVATION - 1860

SHEET NO:

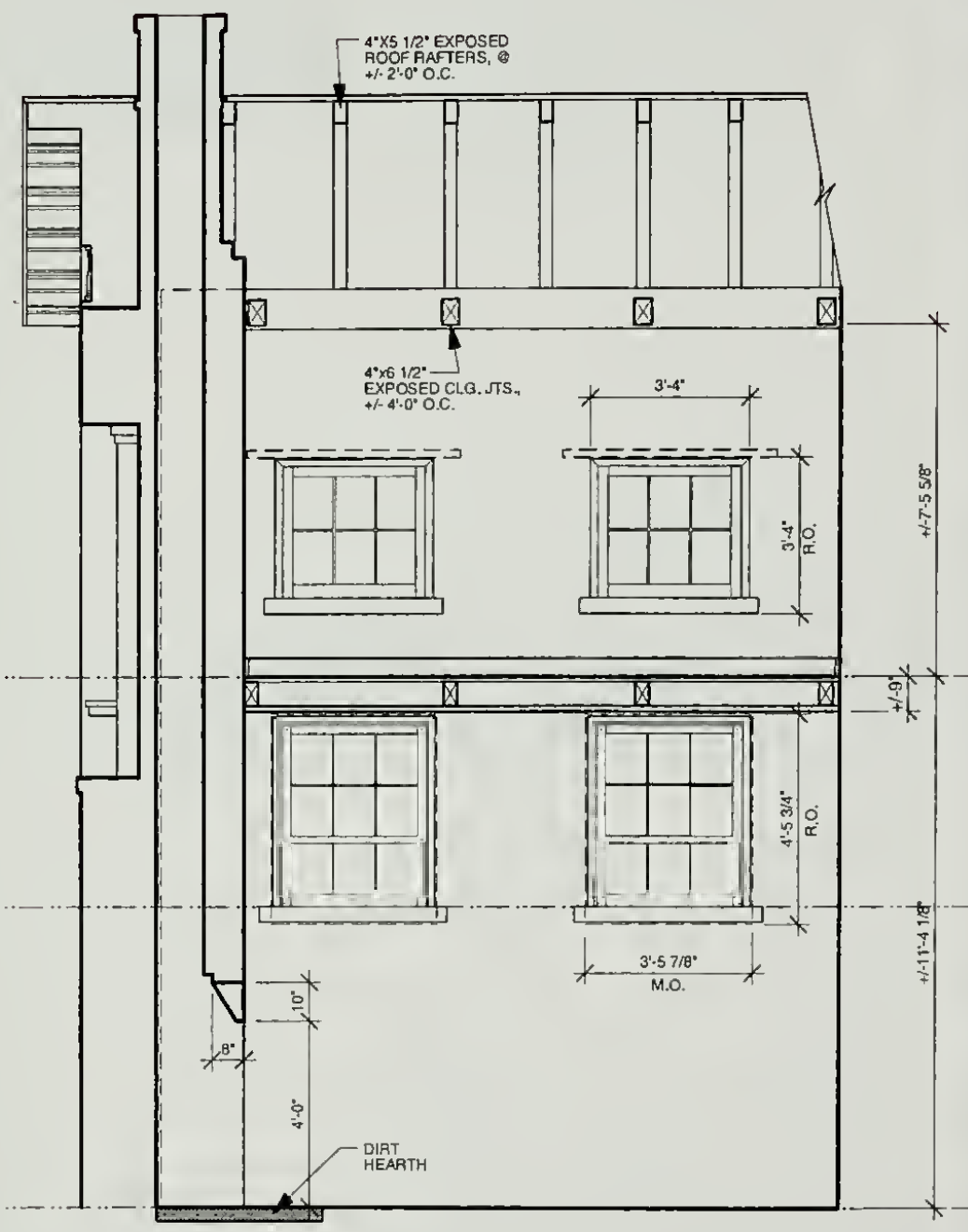
**A-204**



NOTE: DETAILS OF WEST ROOM  
TO BE CONFIRMED BASED ON FUTURE ARCHITECTURAL  
INVESTIGATION.



1 NORTH DEPENDENCY, WEST ROOM  
WEST INTERIOR ELEVATION - 1860  
SCALE 1/4" = 1'-0"



2 NORTH DEPENDENCY, WEST ROOM  
NORTH INTERIOR ELEVATION - 1860  
SCALE 1/4" = 1'-0"

PROGRESS PRINT  
NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES

ARLINGTON NATIONAL CEMETERY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, Texas 78756  
(512) 476-0433 FAX (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 10/01/04

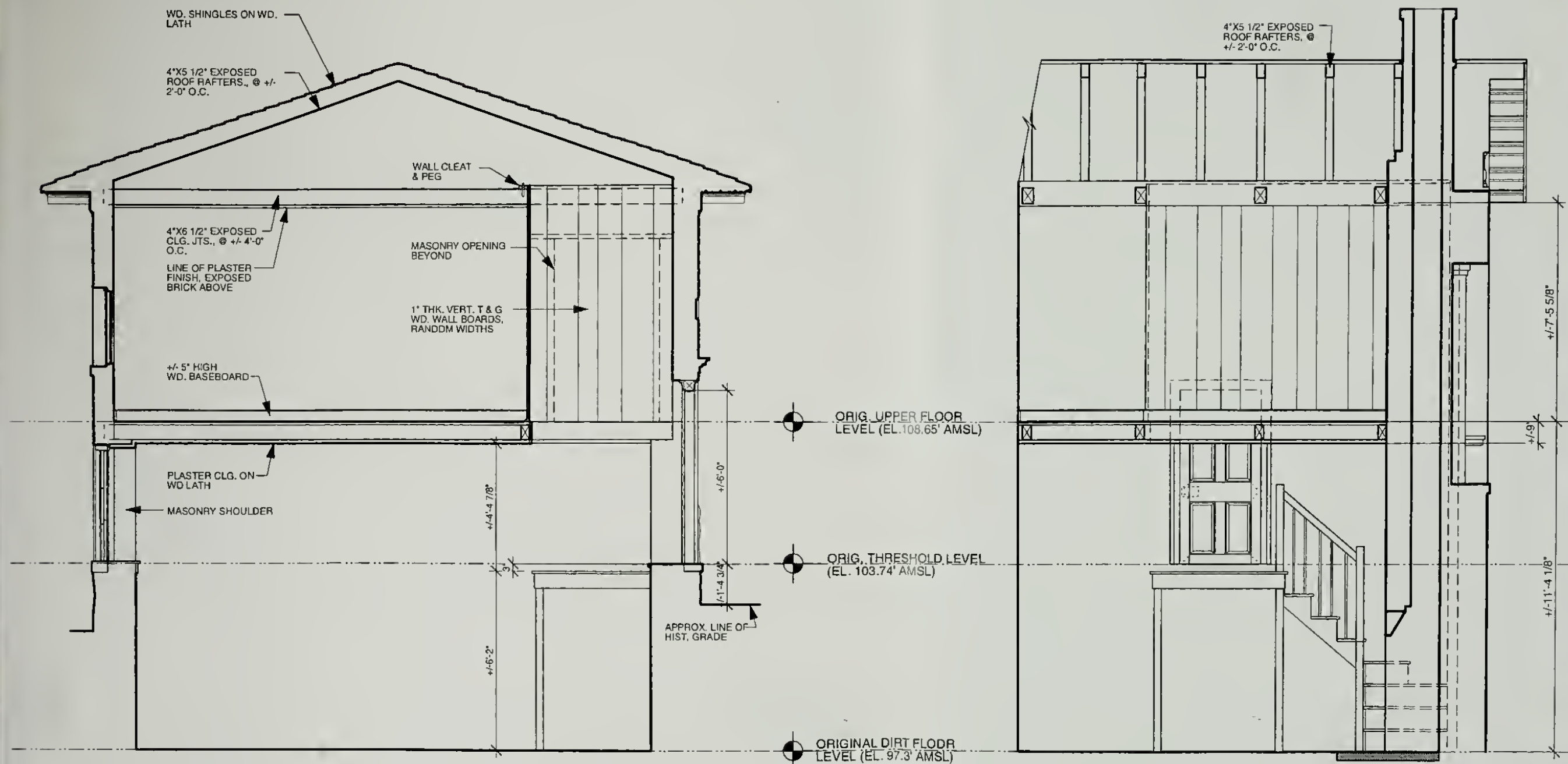
REV:

SHEET NAME:  
NORTH DEPENDENCY  
WEST RM, INT. ELEV. - 1860

SHEET NO:

A-401

NOTE: DETAILS OF WEST ROOM  
TO BE CONFIRMED BASED ON FUTURE ARCHITECTURAL  
INVESTIGATION.



1 NORTH DEPENDENCY, WEST ROOM  
EAST INTERIOR ELEVATION - 1860  
SCALE 1/4" = 1'-0"

2 NORTH DEPENDENCY, WEST ROOM  
SOUTH INTERIOR ELEVATION - 1860  
SCALE 1/4" = 1'-0"

**PROGRESS PRINT**  
**NOT FOR CONSTRUCTION**

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES

ARLINGTON NATIONAL CEMETERY • ARLINGTON, VIRGINIA

**VOLZ & ASSOCIATES, INC.**  
ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 FAX (512) 476-2198



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
WEST RM, INT. ELEV. - 1860

SHEET NO:

**A-402**



**PROGRESS PRINT**  
NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS

1105 West 42nd Street Austin, Texas 78756  
(512) 476-0453 Fax (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

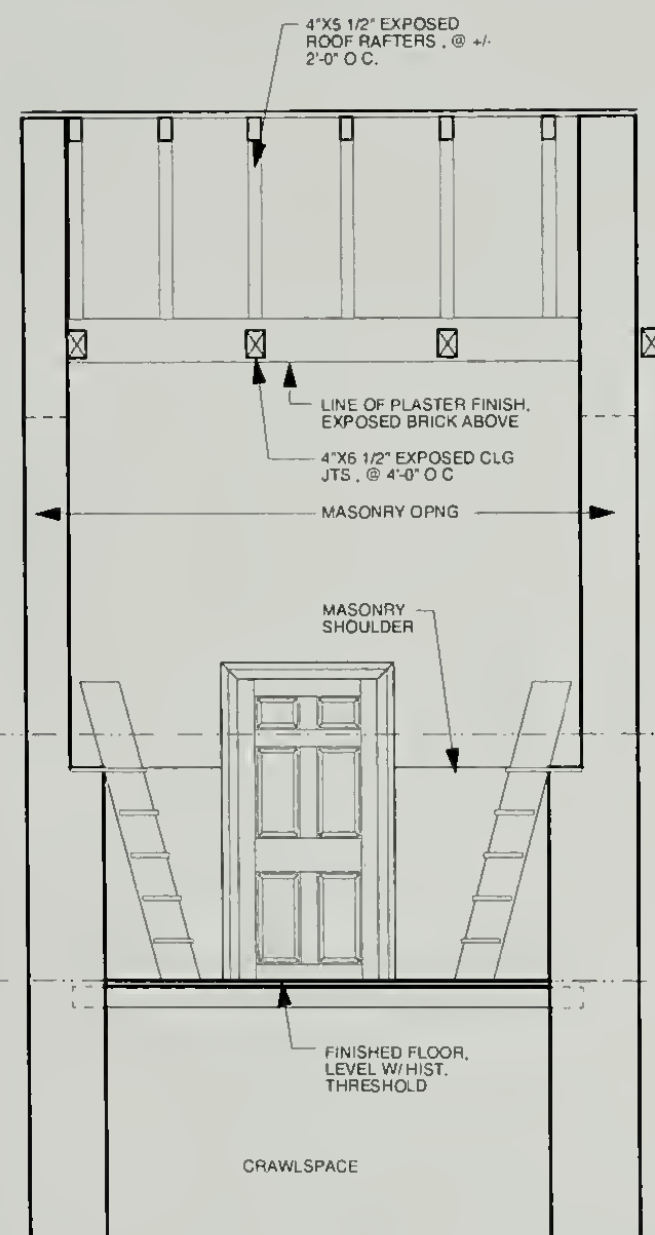
DATE: 10/01/04

REV:

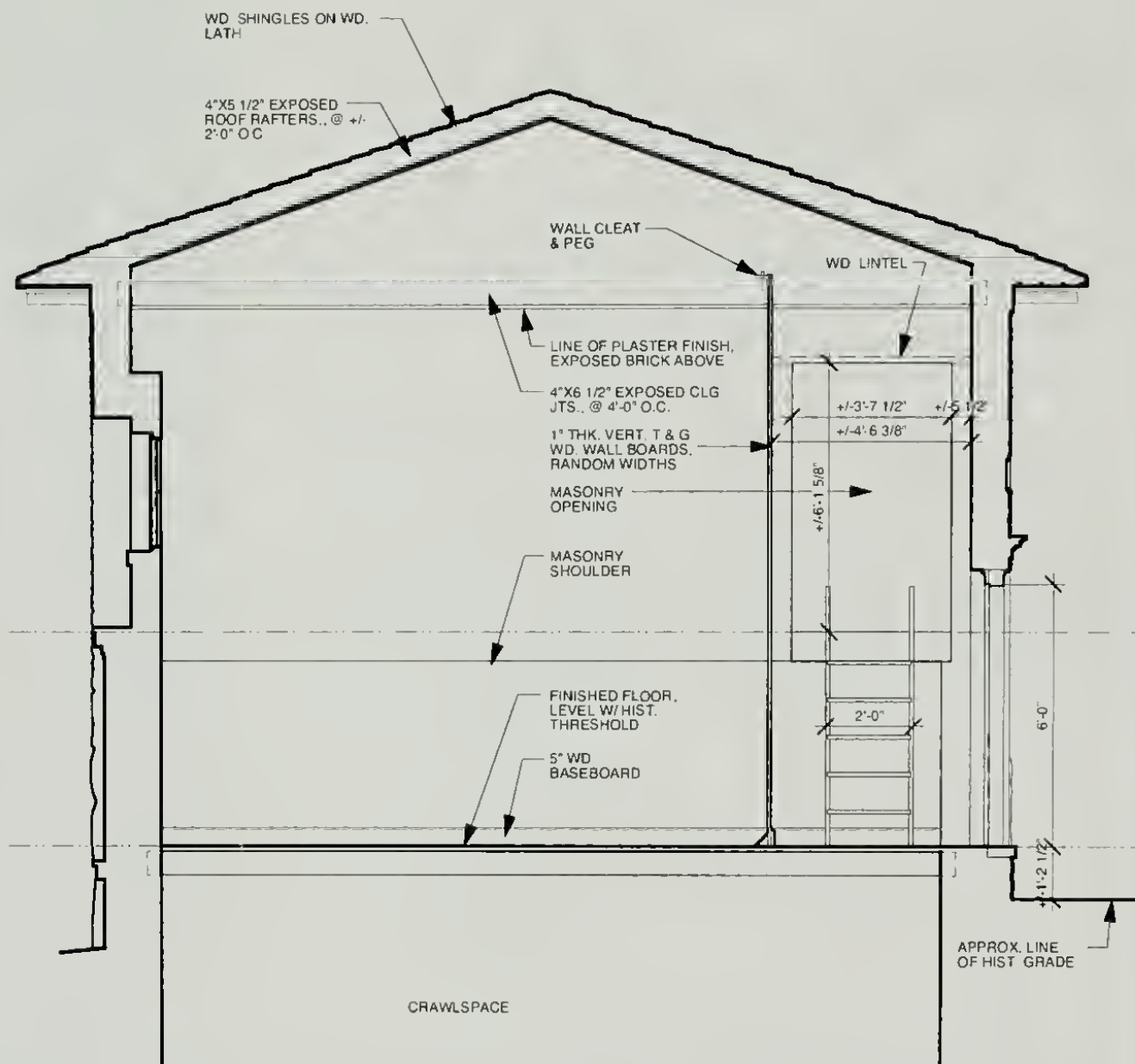
SHEET NAME:  
NORTH DEPENDENCY  
CENTER RM, INT. ELEV - 1860

SHEET NO:

**A-403**



① NORTH DEPENDENCY, CENTER ROOM  
SOUTH INTERIOR ELEVATION - 1860  
SCALE 1/4" = 1'-0"



② NORTH DEPENDENCY, CENTER ROOM  
EAST INTERIOR ELEVATION - 1860  
SCALE 1/4" = 1'-0"



John Volz, Architect  
Texas License No: 8405

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS

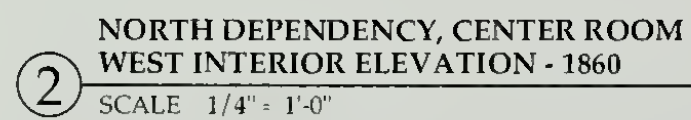
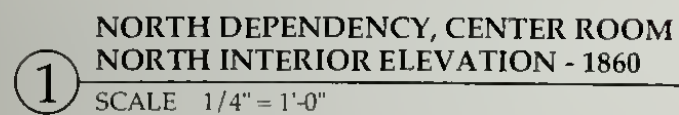
1105 West 42nd Street AUSTIN, Texas 78756  
(512) 476-0433 FAX (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



SHEET NO:

**A-404**



**PROGRESS PRINT  
NOT FOR CONSTRUCTION**

John Volz, Architect  
Texas License No: 8405

**ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES**

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 Fax (512) 476-2198

**VOLZ &  
ASSOCIATES, INC.**



PROJECT NO: 014-02

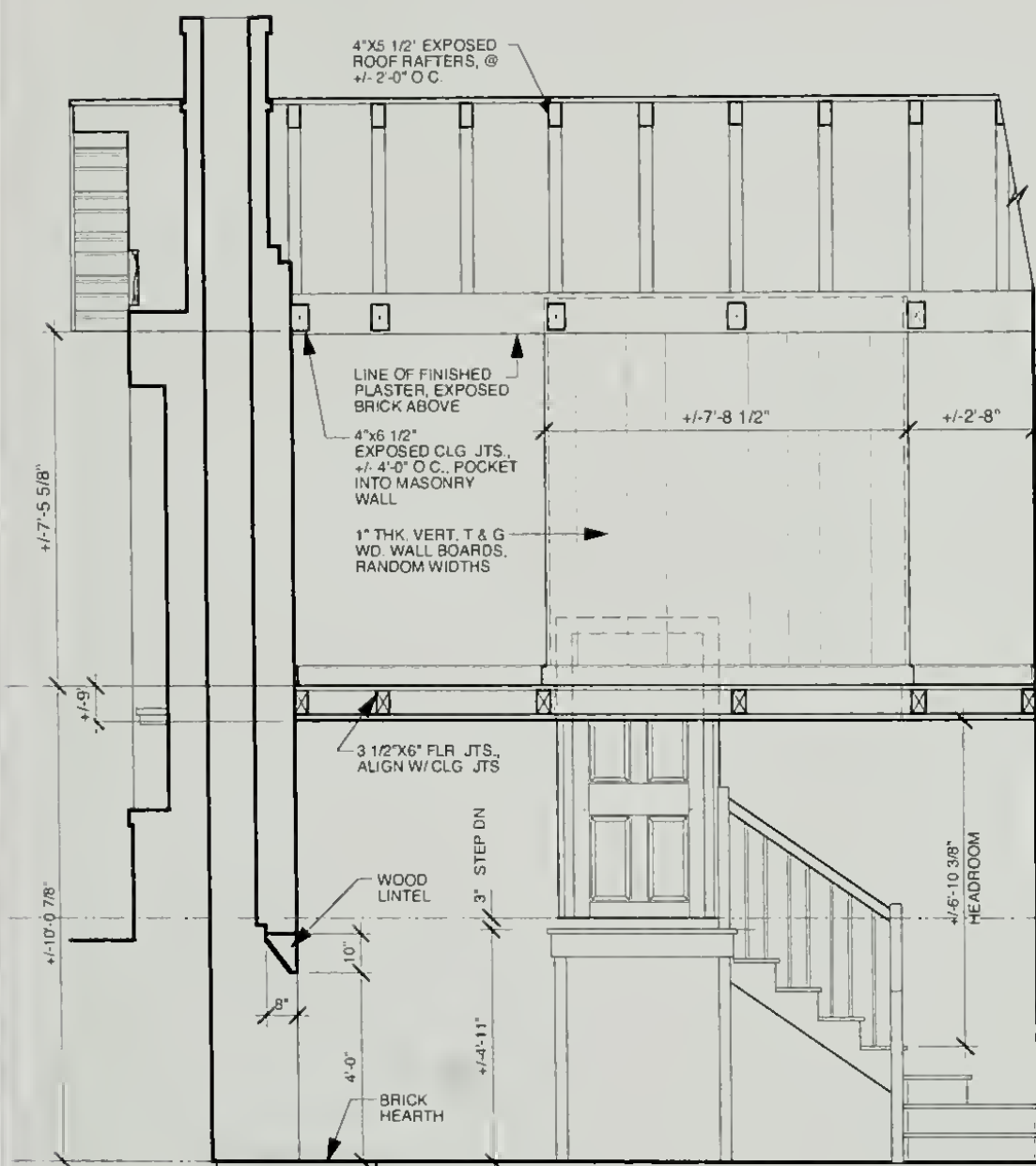
DATE: 10/01/04

REV:

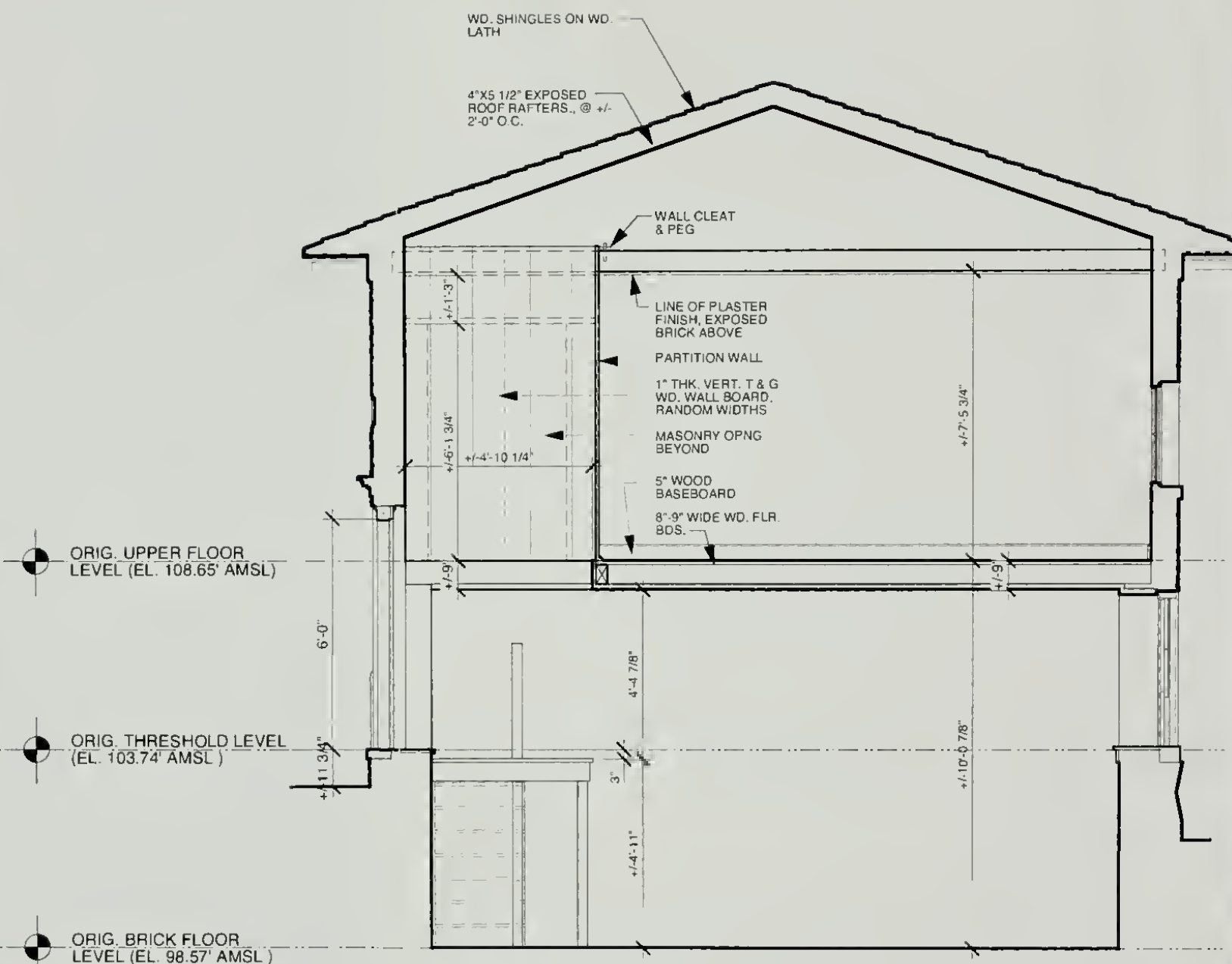
SHEET NAME:  
NORTH DEPENDENCY  
EAST RM, INT. ELEV. - 1860

SHEET NO:

**A-405**



**1** NORTH DEPENDENCY, EAST ROOM (SUMMER KITCHEN)  
SOUTH INTERIOR ELEVATION - 1860  
SCALE 1/4" = 1'-0"



**2** NORTH DEPENDENCY, EAST ROOM (SUMMER KITCHEN)  
WEST INTERIOR ELEVATION - 1860  
SCALE 1/4" = 1'-0"



**PROGRESS PRINT**  
NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street Austin, Texas 78756  
(512) 476-0433 Fax (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 10/01/04

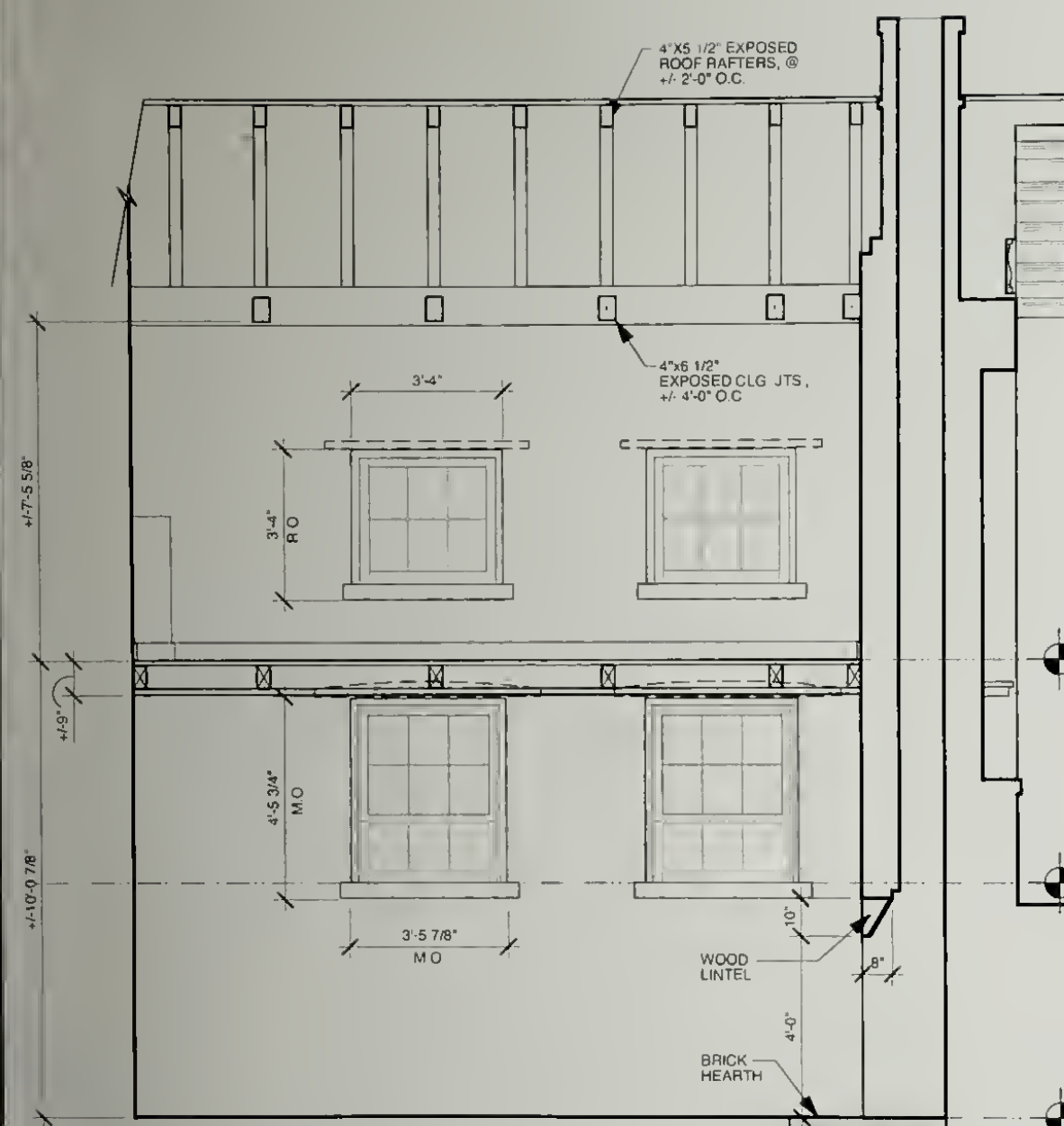
REV:

SHEET NAME:

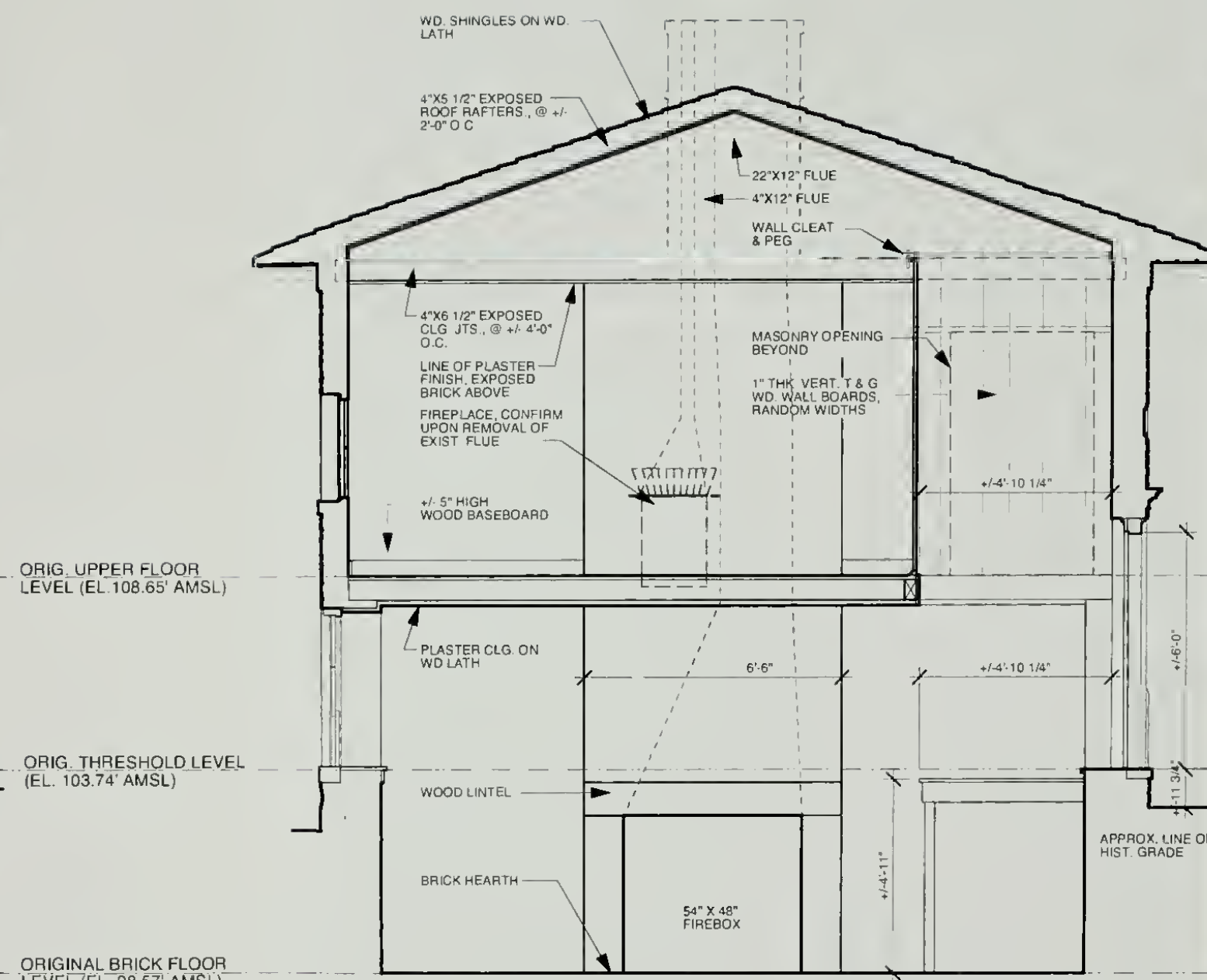
NORTH DEPENDENCY  
EAST RM, INT. ELEV. - 1860

SHEET NO:

**A-406**



① NORTH DEPENDENCY, EAST ROOM (SUMMER KITCHEN)  
NORTH INTERIOR ELEVATION - 1860  
SCALE 1/4" = 1'-0"

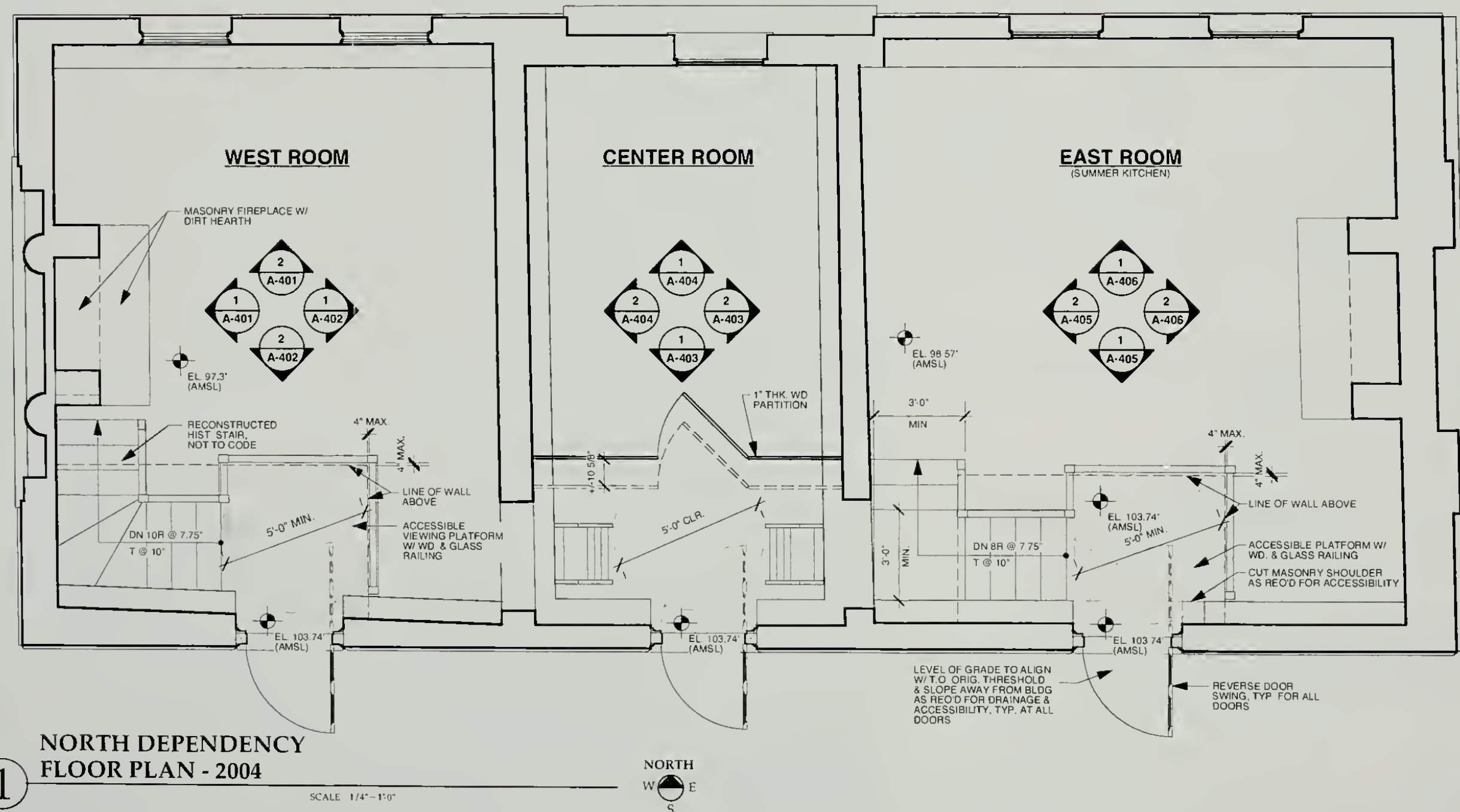


② NORTH DEPENDENCY, EAST ROOM (SUMMER KITCHEN)  
EAST INTERIOR ELEVATION - 1860  
SCALE 1/4" = 1'-0"



## GENERAL NOTES

- INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.
- TO PROTECT HISTORIC ARTIFACTS FROM BECOMING DISTURBED, ORIGINAL FLOOR LEVELS INDICATED SHOULD BE EXCAVATED CLOSE TO THEIR HISTORIC GRADES & THEN COVERED W/ A PROTECTIVE COVERING PRIOR TO INSTALLATION OF RESTORED FINISH (I.E. DIRT OR BRICK).
- DETAILS OF EAST ROOM TO BE CONFIRMED BASED ON FUTURE ARCHITECTURAL INVESTIGATION.
- PROTECT ORIG. EXTERIOR STUCCO FOR CONSERVATION & REPAIR.
- PROTECT ORIG. INTERIOR PLASTER FOR CONSERVATION.
- PROTECT DECORATIVE PANELS ABOVE EXTERIOR DOORS FOR INVESTIGATION & CONSERVATION.
- DRAWINGS ARE FOR DESIGN ONLY. ALL EXIST. STRUCTURAL MEMBERS SCHEDULED TO BE RETAINED & NEW STRUCTURAL ELEMENTS TO BE INCORPORATED INTO THE WORK ARE REQUIRED TO BE DESIGNED BY A STRUCTURAL ENGINEER.



## PROGRESS PRINT NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES

ARLINGTON NATIONAL CEMETERY • ARLINGTON, VIRGINIA

VOLZ &  
ASSOCIATES, INC.

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS

1105 West 42nd Street, Austin, Texas 78756  
(512) 476-0453 FAX (512) 476-2198



PROJECT NO: 014-02

DATE: 10/01/04

REV:

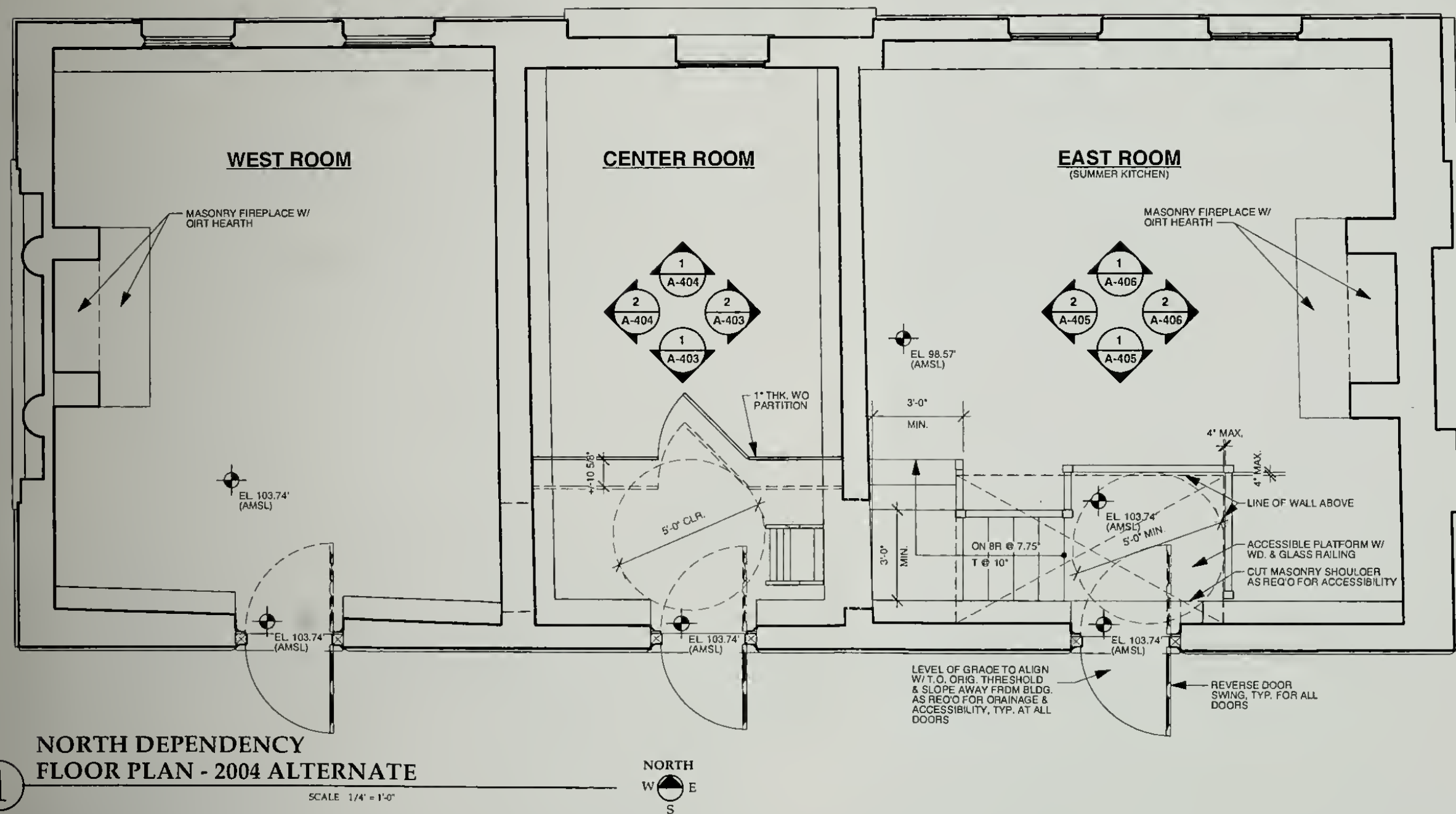
SHEET NAME:  
NORTH DEPENDENCY  
FLOOR PLAN - 2004

SHEET NO:

**A-101**

## GENERAL NOTES

- INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.
- TO PROTECT HISTORIC ARTIFACTS FROM BECOMING DISTURBED, ORIGINAL FLOOR LEVELS INDICATED SHOULD BE EXCAVATED CLOSE TO THEIR HISTORIC GRADES & THEN COVERED W/ A PROTECTIVE COVERING PRIOR TO INSTALLATION OF RESTORED FINISH (IE. DIRT OR BRICK).
- PROTECT ORIG. EXTERIOR STUCCO FOR CONSERVATION & REPAIR.
- PROTECT ORIG. INTERIOR PLASTER FOR CONSERVATION.
- PROTECT DECORATIVE PANELS ABOVE EXTERIOR DOORS FOR INVESTIGATION & CONSERVATION.
- DRAWINGS ARE FOR DESIGN ONLY. ALL EXIST. STRUCTURAL MEMBERS SCHEDULED TO BE RETAINED & NEW STRUCTURAL ELEMENTS TO BE INCORPORATED INTO THE WORK ARE REQUIRED TO BE DESIGNED BY A STRUCTURAL ENGINEER.



**PROGRESS PRINT  
NOT FOR CONSTRUCTION**

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0453 Fax (512) 476-2198

**VOLZ &  
ASSOCIATES, INC.**



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
FLOOR PLAN - 2004 ALT.

SHEET NO:

**A-101**

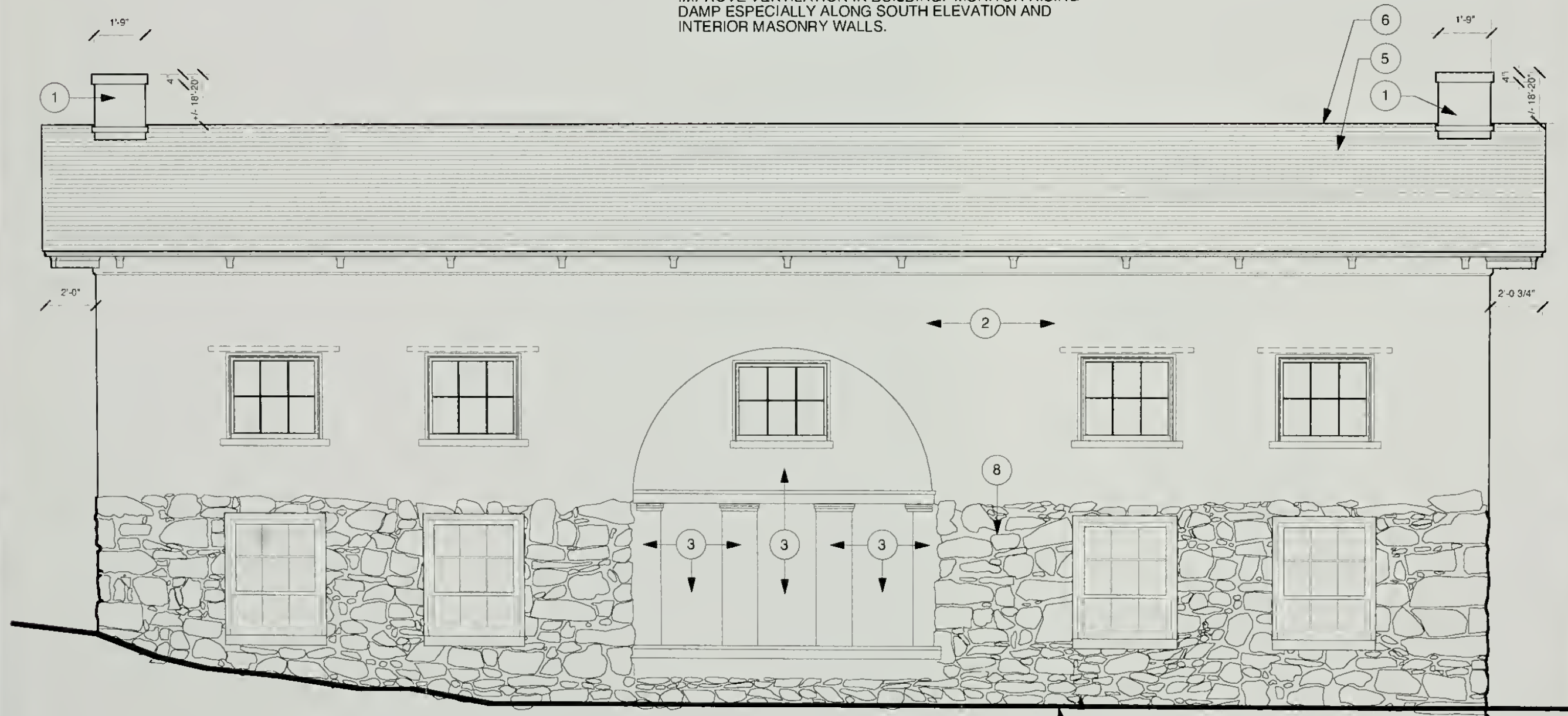


## GENERAL NOTES

- INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.
- TO PROTECT HISTORIC ARTIFACTS FROM BECOMING DISTURBED, ORIGINAL FLOOR LEVELS INDICATED SHOULD BE EXCAVATED CLOSE TO THEIR HISTORIC GRADES & THEN COVERED W/ A PROTECTIVE COVERING PRIOR TO INSTALLATION OF RESTORED FINISH (I.E. DIRT OR BRICK).
- REGRADE AROUND BUILDING TO IMPROVE DRAINAGE. IMPROVE VENTILATION IN BUILDING. MONITOR RISING DAMP ESPECIALLY ALONG SOUTH ELEVATION AND INTERIOR MASONRY WALLS.

## ELEVATION KEY NOTES:

- BRICK CHIMNEY & MASONRY CAP WITH STUCCO FINISH.
- ROUGH CAST STUCCO FINISH, PAINTED. PROTECT ORIG. STUCCO FOR INVESTIGATION & CONSERVATION.
- SMOOTH STUCCO FINISH, PAINTED.
- BEADED ARCHITRAVE W/ MOLDED BACK BAND.
- WOOD SHINGLE ON WOOD LATH, RETAIN WOOD SHEATHING.
- 4" TO 6" RIDGE COMB.
- DECORATIVE PAINTED PANEL, PROTECT FOR INVESTIGATION & CONSERVATION.
- RUBBLE STONE BASE.



**NORTH DEPENDENCY  
NORTH ELEVATION - 2004**

SCALE 1/4" = 1'-0"

— APPROX. LINE OF  
EXIST. GRADE  
MODIFY GRADE TO  
LEVEL OF HIST. GRADE

## PROGRESS PRINT NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES  
ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 FAX (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
NORTH ELEVATION - 2004

SHEET NO:

**A-201**

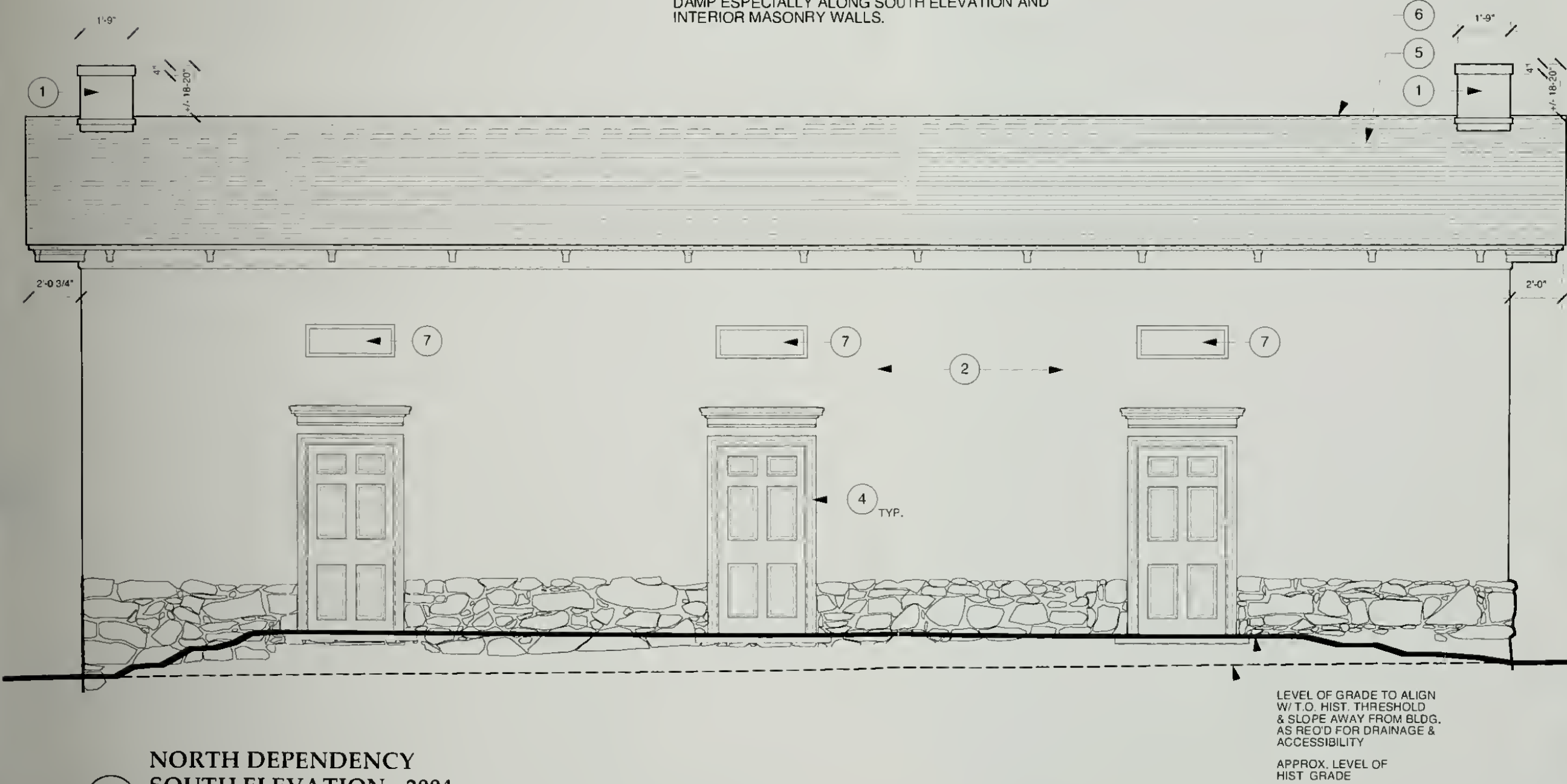


**GENERAL NOTES**

- A. INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- B. ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.
- C. TO PROTECT HISTORIC ARTIFACTS FROM BECOMING DISTURBED, ORIGINAL FLOOR LEVELS INDICATED SHOULD BE EXCAVATED CLOSE TO THEIR HISTORIC GRADES & THEN COVERED W/ A PROTECTIVE COVERING PRIOR TO INSTALLATION OF RESTORED FINISH (I.E. DIRT OR BRICK).
- D. REGRADE AROUND BUILDING TO IMPROVE DRAINAGE. IMPROVE VENTILATION IN BUILDING. MONITOR RISING DAMP ESPECIALLY ALONG SOUTH ELEVATION AND INTERIOR MASONRY WALLS.

**ELEVATION KEY NOTES:**

1. BRICK CHIMNEY & MASONRY CAP WITH STUCCO FINISH.
2. ROUGH CAST STUCCO FINISH, PAINTED. PROTECT ORIG. STUCCO FOR INVESTIGATION & CONSERVATION.
3. SMOOTH STUCCO FINISH, PAINTED.
4. BEADED ARCHITRAVE W/ MOLDED BACK BAND.
5. WOOD SHINGLE ON WOOD LATH, RETAIN WOOD SHEATHING.
6. 4" TO 6" RIDGE COMB.
7. DECORATIVE PAINTED PANEL, PROTECT FOR INVESTIGATION & CONSERVATION.
8. RUBBLE STONE BASE.



**NORTH DEPENDENCY  
SOUTH ELEVATION - 2004**

SCALE 1/4" = 1'-0"

**PROGRESS PRINT  
NOT FOR CONSTRUCTION**

John Volz, Architect  
Texas License No: 8405

**ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES**

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street Austin, Texas 78756  
(512) 476-0433 Fax (512) 476-2198

**VOLZ &  
ASSOCIATES, INC.**



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
SOUTH ELEVATION - 2004

SHEET NO:

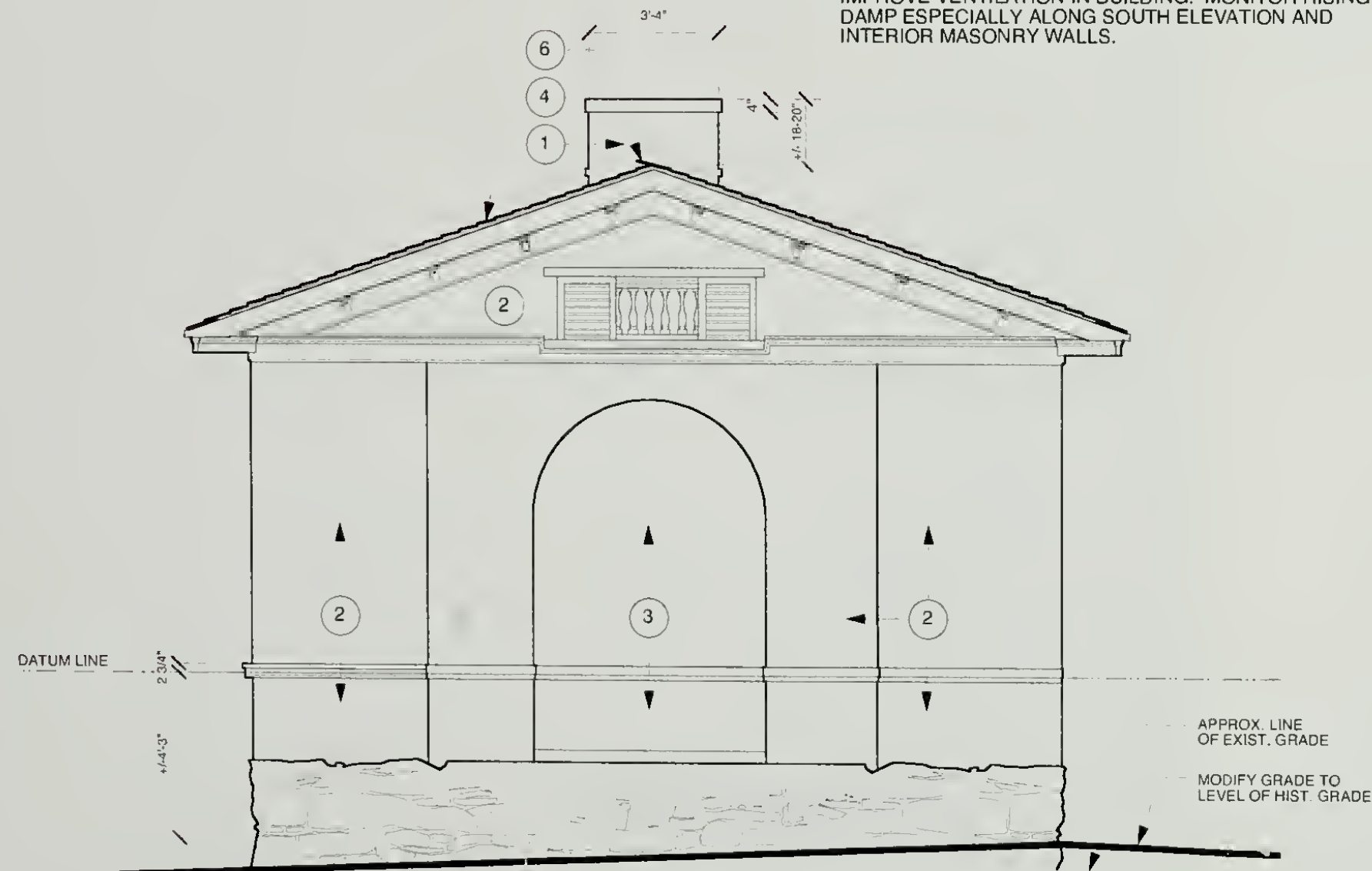
**A-202**

## GENERAL NOTES

- INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.
- TO PROTECT HISTORIC ARTIFACTS FROM BECOMING DISTURBED, ORIGINAL FLOOR LEVELS INDICATED SHOULD BE EXCAVATED CLOSE TO THEIR HISTORIC GRADES & THEN COVERED W/ A PROTECTIVE COVERING PRIOR TO INSTALLATION OF RESTORED FINISH (I.E. DIRT OR BRICK).
- REGRADE AROUND BUILDING TO IMPROVE DRAINAGE. IMPROVE VENTILATION IN BUILDING. MONITOR RISING DAMP ESPECIALLY ALONG SOUTH ELEVATION AND INTERIOR MASONRY WALLS.

## ELEVATION KEY NOTES:

- BRICK CHIMNEY & MASONRY CAP WITH STUCCO FINISH.
- ROUGH CAST STUCCO FINISH, PAINTED. PROTECT ORIG. STUCCO FOR INVESTIGATION & CONSERVATION.
- SMOOTH STUCCO FINISH, PAINTED.
- BEADED ARCHITRAVE W/ MOLDED BACK BAND.
- WOOD SHINGLE ON WOOD LATH, RETAIN WOOD SHEATHING.
- 4" TO 6" RIDGE COMB.
- DECORATIVE PAINTED PANEL, PROTECT FOR INVESTIGATION & CONSERVATION.
- RUBBLE STONE BASE.



**1** NORTH DEPENDENCY  
EAST ELEVATION - 2004

SCALE 1/4" = 1'-0"

## PROGRESS PRINT NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES  
ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street Austin, Texas 78756  
(512) 476-0455 Fax (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
EAST ELEVATION - 2004

SHEET NO:

**A-203**

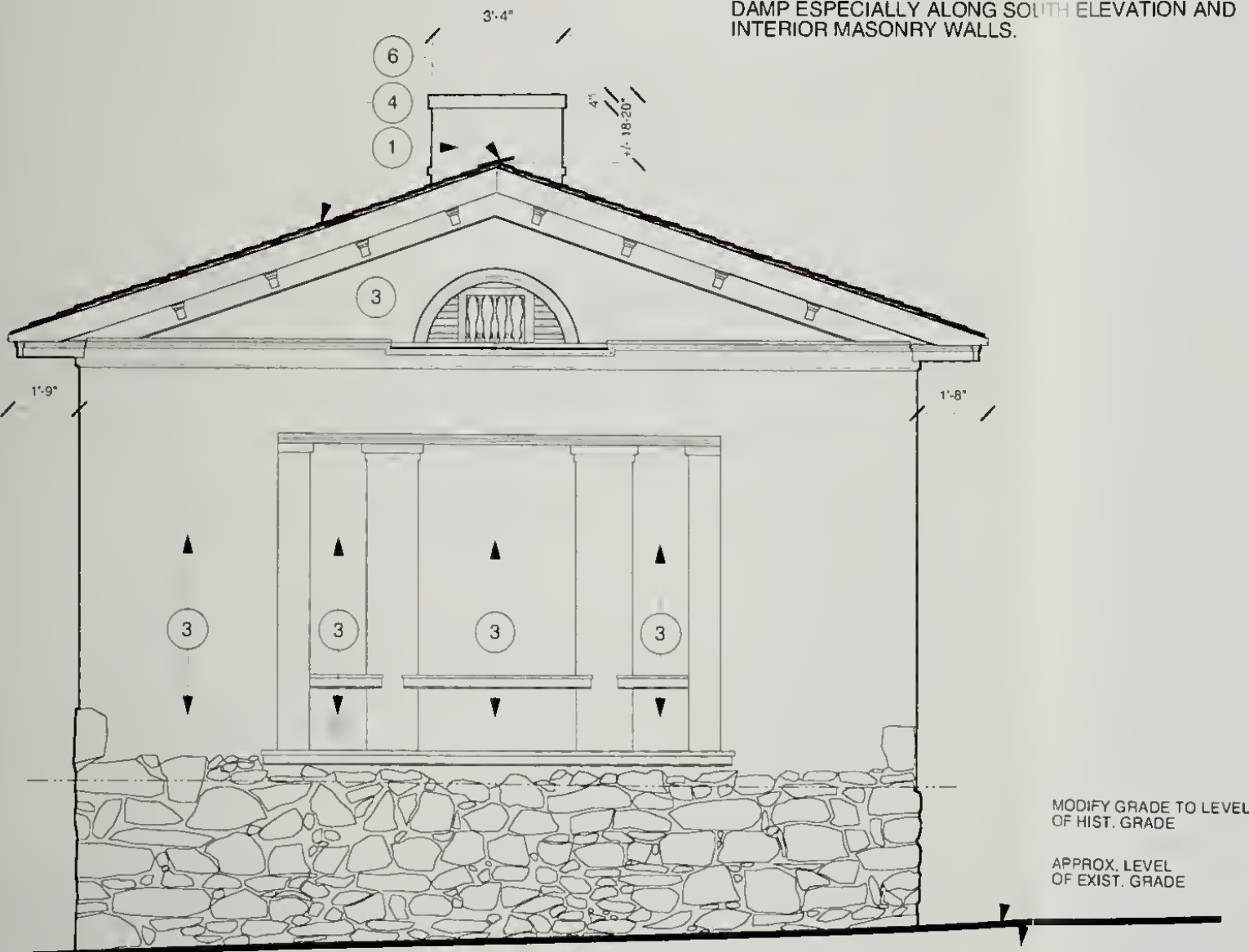


**GENERAL NOTES**

- A. INFORMATION FOR THE BASE DRAWINGS WAS PROVIDED BY HABS AND SUPPLEMENTED W/ ADDITIONAL FIELD DIMENSIONS PROVIDED BY THE NATIONAL PARK SERVICE (NPS).
- B. ELEVATION MARKINGS WHERE INDICATED WERE PROVIDED BY THE NPS ESTABLISHED FROM A USDI BRASS DISC LOCATED ON THE STEPS LEADING DOWN FROM THE NORTHEAST SIDE OF ARLINGTON HOUSE TOWARD THE GRAVESITE OF ADMIRAL DAVID DIXON. THE ELEVATION OF THE DISC IS AT 100' ABOVE MEAN SEA LEVEL (AMSL). NPS NEEDS TO RECONFIRM ELEVATION MARKER READING.
- C. TO PROTECT HISTORIC ARTIFACTS FROM BECOMING DISTURBED, ORIGINAL FLOOR LEVELS INDICATED SHOULD BE EXCAVATED CLOSE TO THEIR HISTORIC GRADES & THEN COVERED W/ A PROTECTIVE COVERING PRIOR TO INSTALLATION OF RESTORED FINISH (I.E. DIRT OR BRICK).
- D. REGRADE AROUND BUILDING TO IMPROVE DRAINAGE. IMPROVE VENTILATION IN BUILDING. MONITOR RISING DAMP ESPECIALLY ALONG SOUTH ELEVATION AND INTERIOR MASONRY WALLS.

**ELEVATION KEY NOTES:**

1. BRICK CHIMNEY & MASONRY CAP WITH STUCCO FINISH.
2. ROUGH CAST STUCCO FINISH, PAINTED. PROTECT ORIG. STUCCO FOR INVESTIGATION & CONSERVATION.
3. SMOOTH STUCCO FINISH, PAINTED.
4. BEADED ARCHITRAVE W/ MOLDED BACK BAND.
5. WOOD SHINGLE ON WOOD LATH, RETAIN WOOD SHEATHING.
6. 4" TO 6" RIDGE COMB.
7. DECORATIVE PAINTED PANEL, PROTECT FOR INVESTIGATION & CONSERVATION.
8. RUBBLE STONE BASE.



**NORTH DEPENDENCY  
WEST ELEVATION - 2004**

**1**

SCALE 1/4" = 1'-0"

**PROGRESS PRINT  
NOT FOR CONSTRUCTION**

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 Fax (512) 476-2198

**VOLZ &  
ASSOCIATES, INC.**



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
WEST ELEVATION - 2004

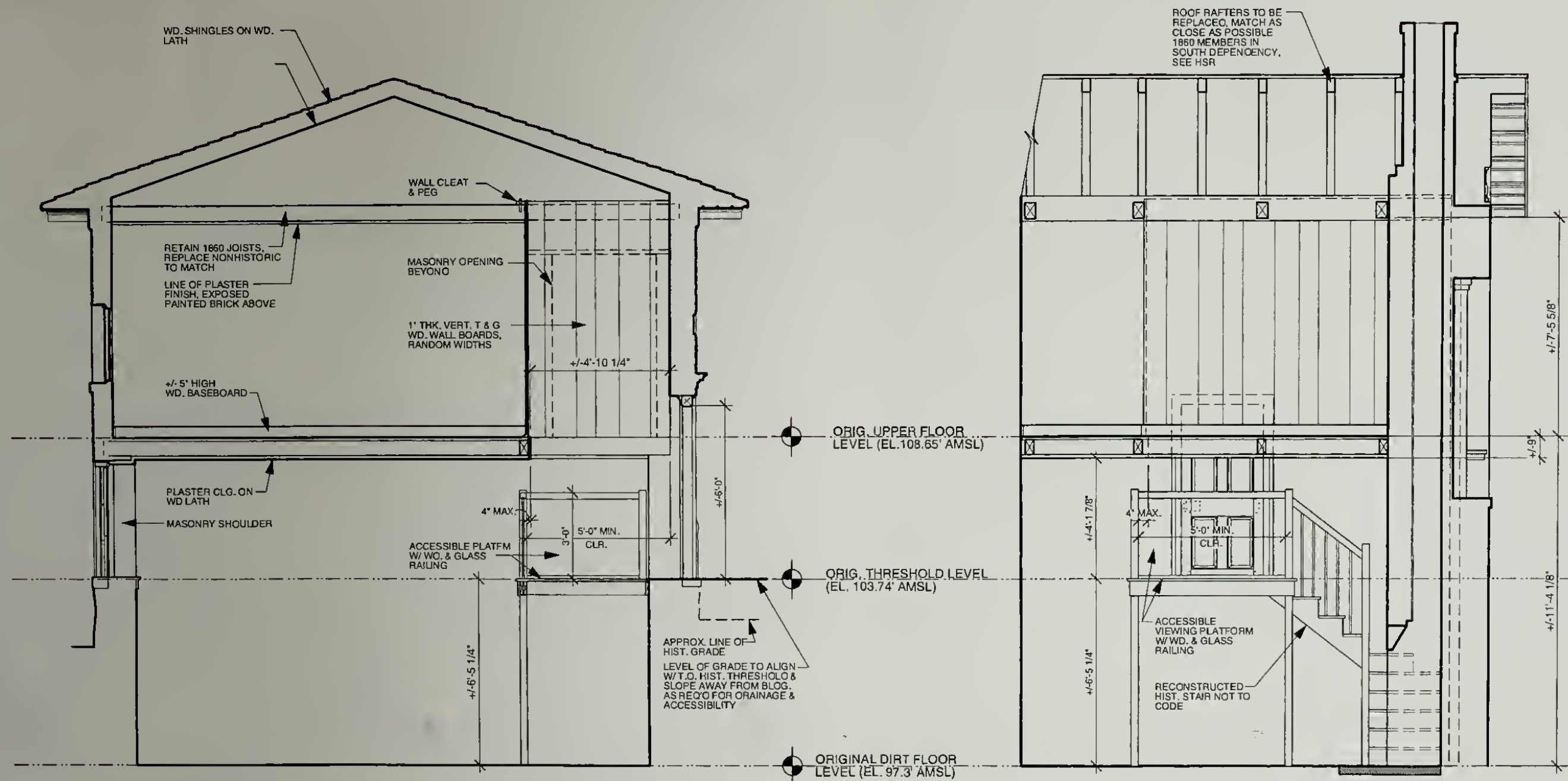
SHEET NO:

**A-204**





NOTE: DETAILS OF WEST ROOM  
TO BE CONFIRMED BASED ON FUTURE ARCHITECTURAL  
INVESTIGATION.



1 NORTH DEPENDENCY, WEST ROOM  
EAST INTERIOR ELEVATION - 2004  
SCALE 1/4" = 1'-0"

2 NORTH DEPENDENCY, WEST ROOM  
SOUTH INTERIOR ELEVATION - 2004  
SCALE 1/4" = 1'-0"

**PROGRESS PRINT**  
NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES

ARLINGTON NATIONAL CEMETERY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0435 Fax (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
WEST RM, INT. ELEV. - 2004

SHEET NO:

**A-402**



**PROGRESS PRINT  
NOT FOR CONSTRUCTION**

John Volz, Architect  
Texas License No: 8405

**ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES**

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0435 FAX (512) 476-2198

**VOLZ &  
ASSOCIATES, INC.**



PROJECT NO: 014-02

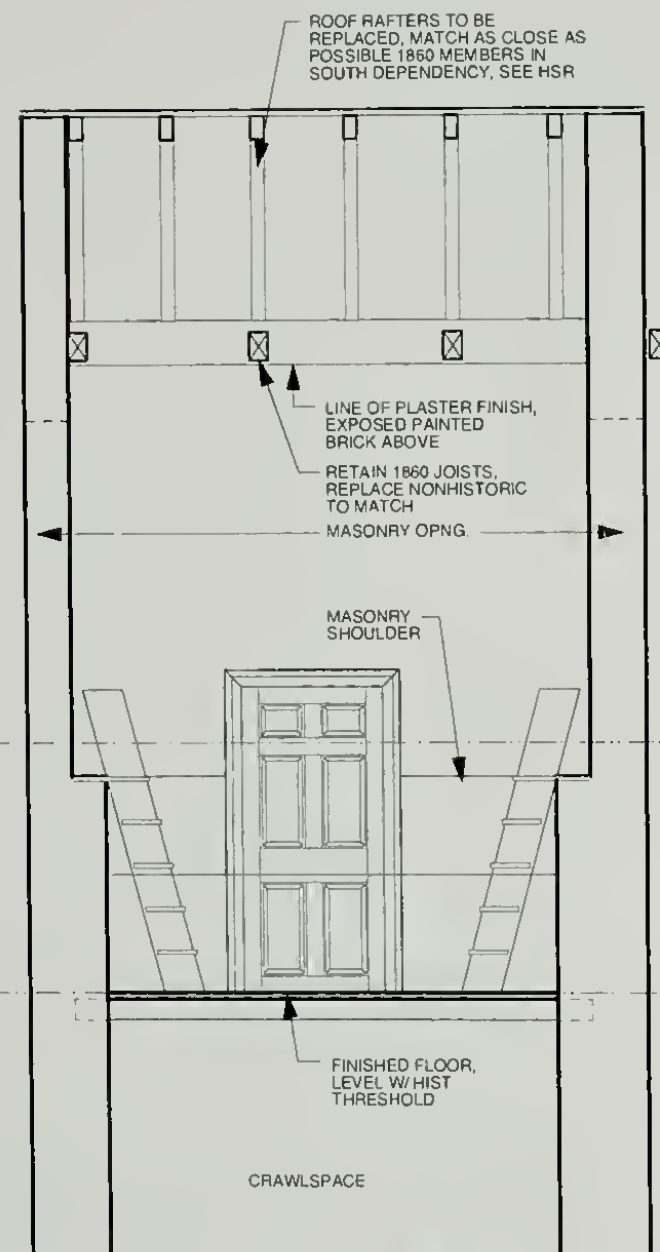
DATE: 10/01/04

REV:

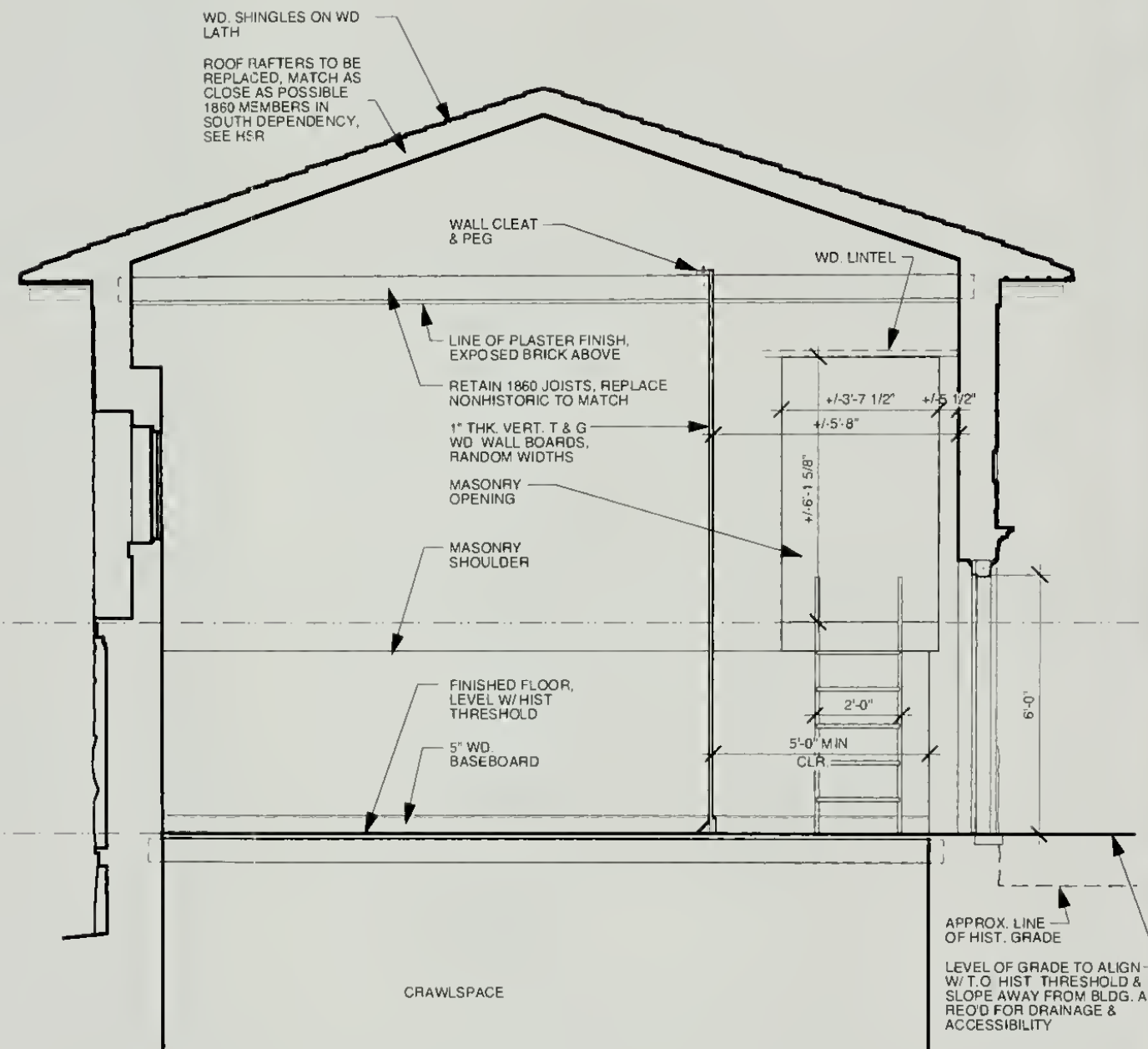
SHEET NAME:  
NORTH DEPENDENCY  
CENTER RM, INT. ELEV - 2004

SHEET NO:

**A-403**



**1** NORTH DEPENDENCY, CENTER ROOM  
SOUTH INTERIOR ELEVATION - 2004  
SCALE 1/4" = 1'-0"



**2** NORTH DEPENDENCY, CENTER ROOM  
EAST INTERIOR ELEVATION - 2004  
SCALE 1/4" = 1'-0"



**PROGRESS PRINT**  
NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS  
1105 West 42nd Street Austin, Texas 78756

VOLZ &  
ASSOCIATES INC



PROJECT NO: 014-02

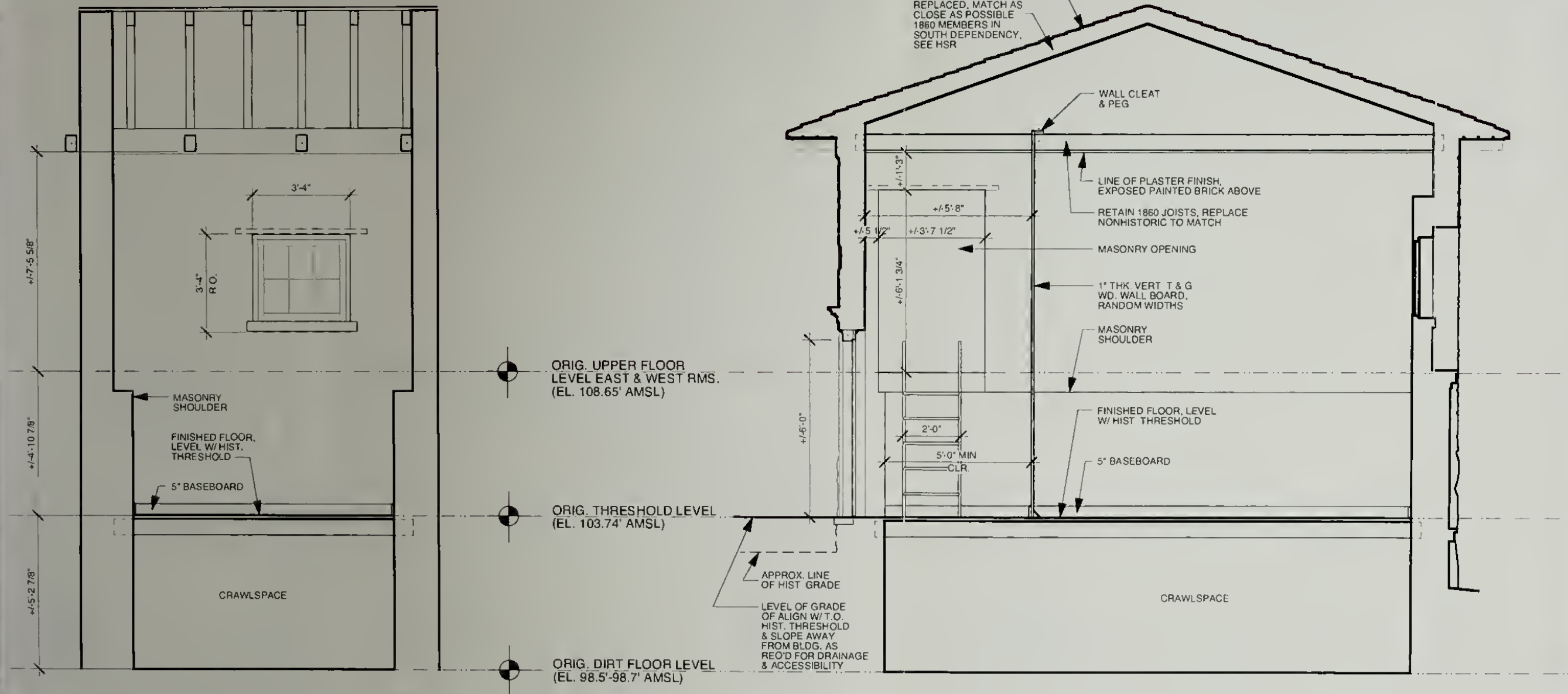
DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
CENTER RM, INT. ELEV - 200

SHEET NO:

**A-404**



**PROGRESS PRINT**  
NOT FOR CONSTRUCTION

John Volz, Architect  
Texas License No: 8405

ARLINGTON HOUSE  
RESTORATION OF  
NORTH & SOUTH DEPENDENCIES

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS

1105 West 42nd Street, Austin, Texas 78756  
(512) 476-0433 Fax (512) 476-2198

VOLZ &  
ASSOCIATES, INC.



PROJECT NO: 014-02

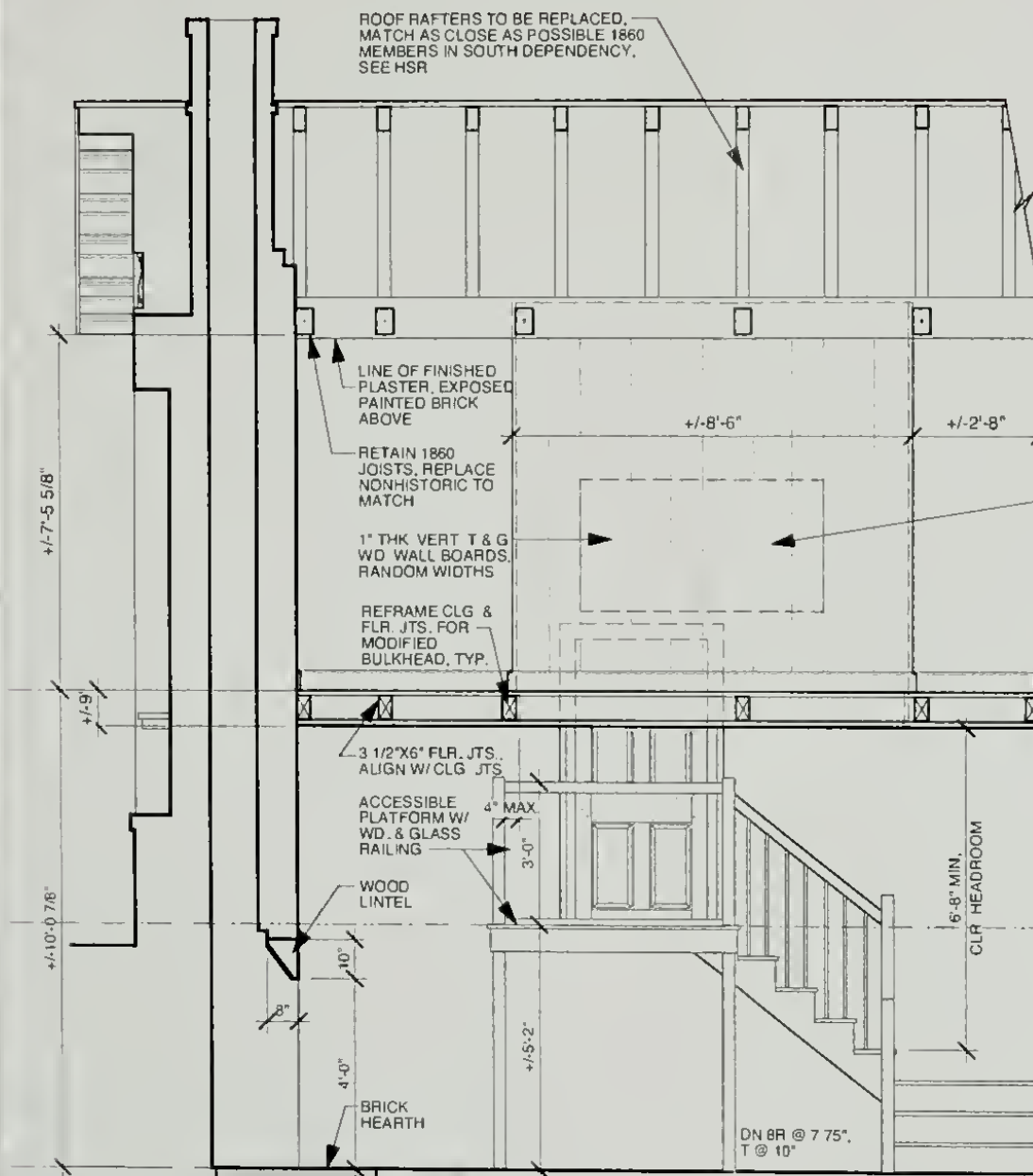
DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
EAST RM, INT. ELEV. - 2004

SHEET NO:

**A-405**



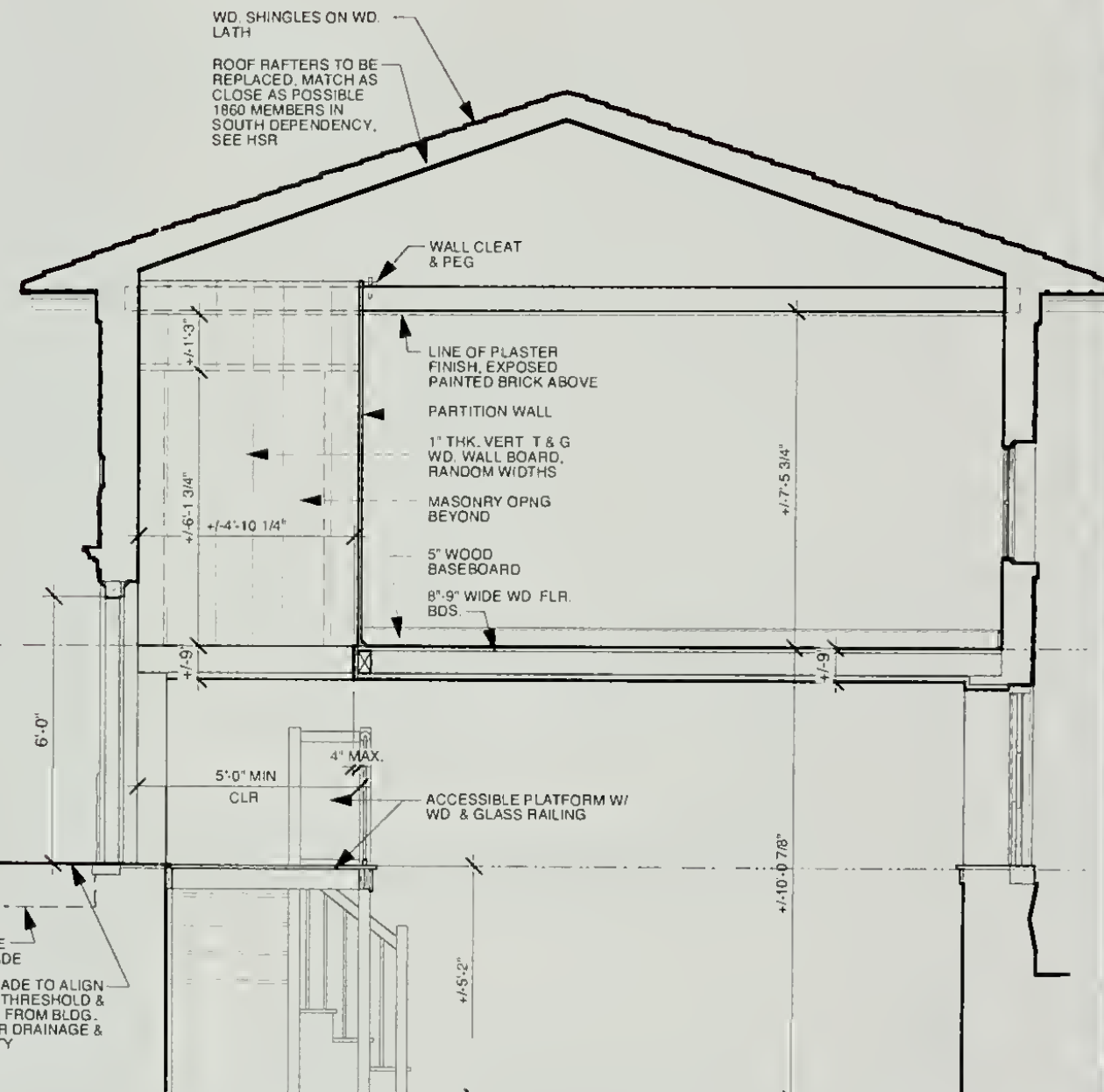
APPROX. LOCATION OF  
VIEWING POINT TO UPPER  
LEVEL FROM ENTRY  
PLATFORM W/  
REMOVABLE WALL  
SECTION

ORIG. UPPER FLOOR  
LEVEL (EL. 108.65' AMSL)

ORIG. THRESHOLD LEVEL  
(EL. 103.74' AMSL)

ORIG. BRICK FLOOR  
LEVEL (EL. 98.57' AMSL)

APPROX. LINE  
OF HIST. GRADE  
LEVEL OF GRADE TO ALIGN  
W/ T.O. HIST. THRESHOLD &  
SLOPE AWAY FROM BLDG.  
AS REQD FOR DRAINAGE &  
ACCESSIBILITY



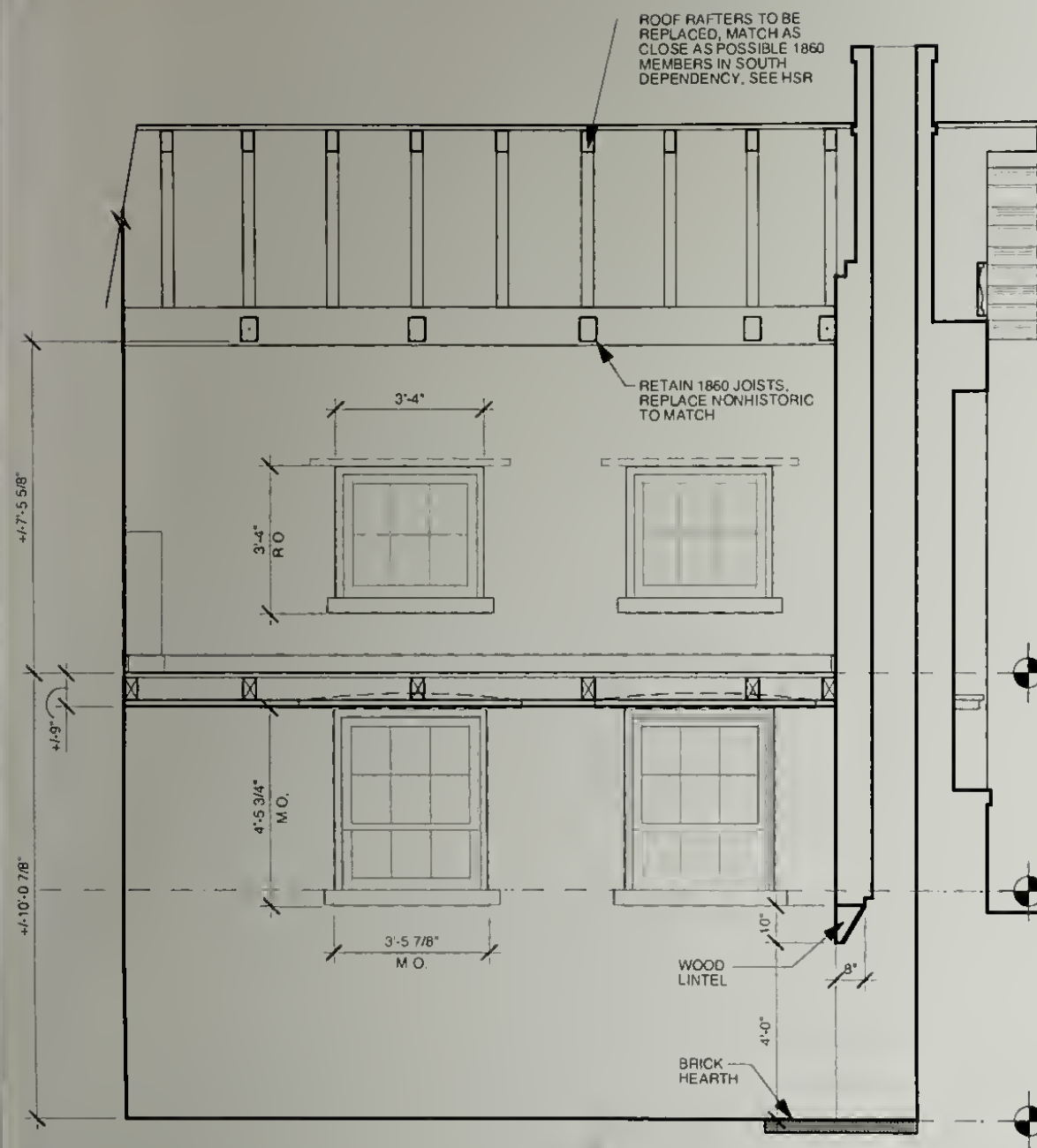
NORTH DEPENDENCY, EAST ROOM (SUMMER KITCHEN)  
WEST INTERIOR ELEVATION - 2004

SCALE 1/4" = 1'-0"

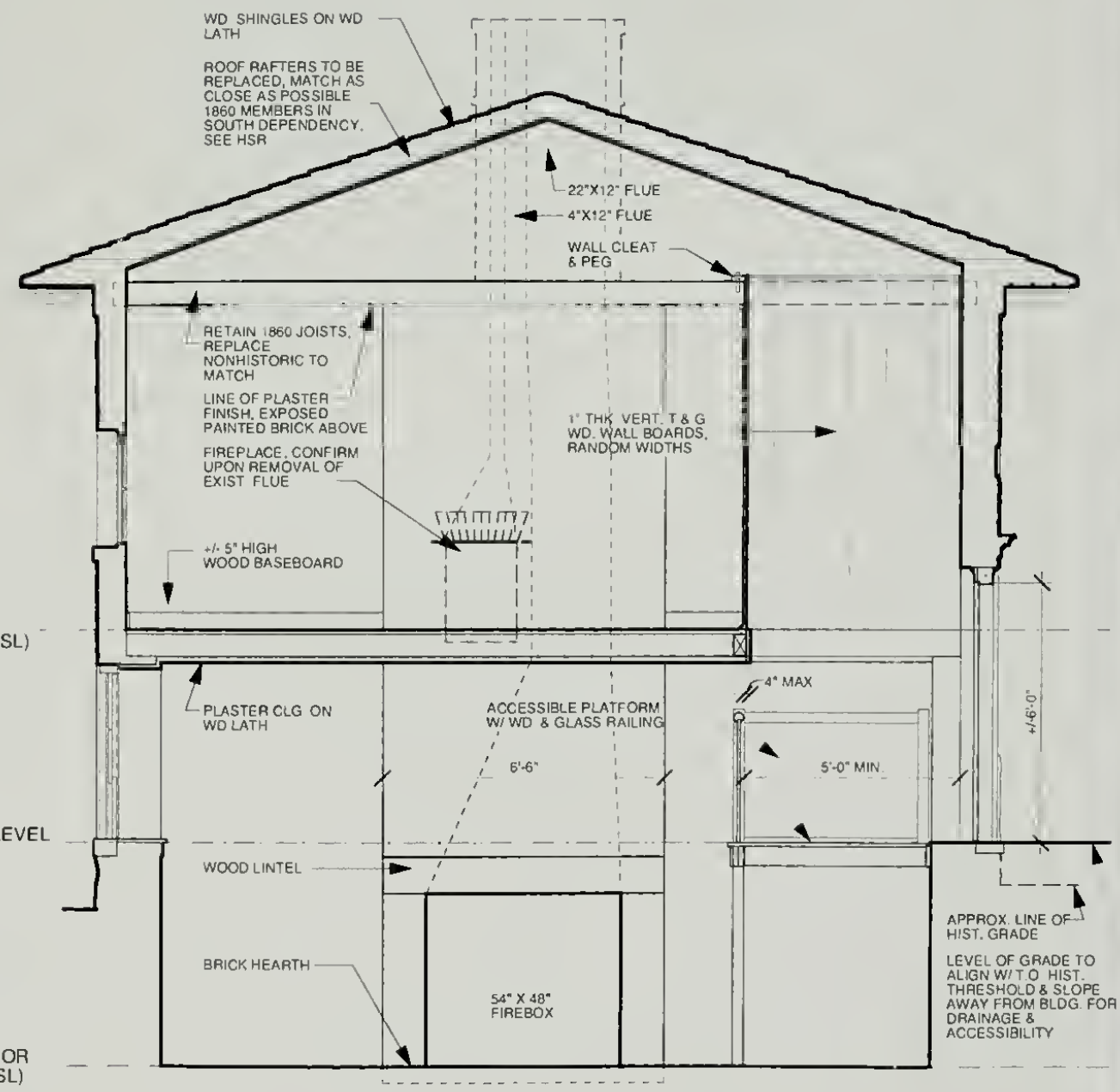
NORTH DEPENDENCY, EAST ROOM (SUMMER KITCHEN)  
SOUTH INTERIOR ELEVATION - 2004

SCALE 1/4" = 1'-0"





1 NORTH DEPENDENCY, EAST ROOM (SUMMER KITCHEN)  
NORTH INTERIOR ELEVATION - 2004  
SCALE 1/4" = 1'-0"



2 NORTH DEPENDENCY, EAST ROOM (SUMMER KITCHEN)  
EAST INTERIOR ELEVATION - 2004  
SCALE 1/4" = 1'-0"

**PROGRESS PRINT**  
**NOT FOR CONSTRUCTION**

John Volz, Architect  
Texas License No: 8405

**ARLINGTON HOUSE**  
**RESTORATION OF**  
**NORTH & SOUTH DEPENDENCIES**

ARLINGTON NATIONAL CEMETARY • ARLINGTON, VIRGINIA

ARCHITECTURE • HISTORIC PRESERVATION • HISTORICAL INTERIORS

**VOLZ &**  
**ASSOCIATES, INC.**



1105 West 42nd Street AUSTIN, TEXAS 78756  
(512) 476-0433 FAX (512) 476-2198

PROJECT NO: 014-02

DATE: 10/01/04

REV:

SHEET NAME:  
NORTH DEPENDENCY  
EAST RM, INT. ELEV. - 2004

SHEET NO:

**A-406**





# Appendix J

*Gunston Hall*

---



To illustrate the historic opening and indicate that the room beyond was similar in use and configuration to the east room upper-level, a trompe-l'oeil painting can be made on the surface of a recessed infill panel set within the historic opening. The example above, created for Gunston Hall Plantation in Mason Neck, VA showed the view into a stairwell and included a human figure turning the corner to the right of the opening with his back to the center room vestibule.





